SEQUENCE LISTING

<110> Rosen et al.

<120> 31 Human secreted proteins

<130> PZ026P1C2

<150> 09/787,889
<151> 2001-03-06

<150> 09/393,022
<151> 1999-09-09

<150> PCT/US99/05721
<151> 1999-03-11

<150> 60/077,714
<151> 1998-03-12

<150> 60/077,686
<151> 1998-03-12

<150> 60/077,687
<151> 1998-03-12

<150> 60/077,696
<151> 1998-03-12

<160> 185

<170> PatentIn Ver. 2.0

<210> 1
<211> 733
<212> DNA
<213> Homo sapiens

<400> 1
gggatccgga gcccaaatct tctgacaaaa ctcacacatg cccaccgtgc ccagcacctg 60
aattcgaggg tgcaccgtca gtcttcctct tccccccaaa acccaaggac accctcatga 120
tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg 180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300
ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca acccccatcg 360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420
catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct 480
atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga 540
ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg 600
acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660
acaaccacta cacgcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc 720
gactctagag gat 733

<210> 2
<211> 5
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (3)

<223> Xaa equals any of the twenty naturally occurring L-amino acids

<400> 2
Trp Ser Xaa Trp Ser
1 5

<210> 3
<211> 86
<212> DNA
<213> Artificial sequence

<220>
<223> Primer containing a XhoI site

<400> 3
gcgcctcgag atttccccga aatctagatt tccccgaaat gatttccccg aaatgatttc 60
cccgaaatat ctgccatctc aattag 86

<210> 4
<211> 27
<212> DNA
<213> Artificial sequence

<220>
<223> Primer containing a HindIII site

<400> 4
gcggcaagct ttttgcaaag cctaggc 27

<210> 5
<211> 271
<212> DNA
<213> Artificial sequence

<220>
<223> Fragment flanked by XhoI and HindIII sites

<400> 5
ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg 60
aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc 120
gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa ttttttttat 180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt 240
ttttggaggc ctaggctttt gcaaaaagct t 271

<210> 6
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Primer containing a XhoI site

<400> 6
gcgctcgagg gatgacagcg atagaacccc gg 32

<210> 7
<211> 31
<212> DNA
<213> Artificial sequence

<220>

<223> Primer containing a HindIII site

<400> 7
gcgaagcttc gcgactcccc ggatccgcct c 31

<210> 8
<211> 12
<212> DNA
<213> Artificial sequence

<220>
<223> NF-KB binding site

<400> 8
ggggactttc cc 12

<210> 9
<211> 73
<212> DNA
<213> Artificial sequence

<220>
<223> Fragment containing a XhoI site

<400> 9
gcggcctcga ggggactttc ccggggactt tccggggact ttccgggact ttccatcctg 60
ccatctcaat tag 73

<210> 10
<211> 256
<212> DNA
<213> Artificial sequence

<220>
<223> Fragment flanked by XhoI and HindIII sites

<400> 10
ctcgagggga ctttcccggg gactttccgg ggactttccg ggactttcca tctgccatct 60
caattagtca gcaaccatag tcccgccccc aactccgccc atcccgcccc taactccgcc 120
cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga 180
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg 240
cttttgcaaa aagctt 256

<210> 11
<211> 790
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (37)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (55)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (76)

<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (112)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (120)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (137)
<223> n equals a,t,g, or c

<400> 11
tcaactgggt gaaaaggaaa acccacccct ggcgccnaat acgcaaaccg ccttntcccc 60
ggcgcgttgg ccgatncatt aatgcagctg gcacgacagt tttcccgact gnaaagcggn 120
cagtgagcgc aacgcantta aatgtgagtt agctcactca ttagcacccc aggctttaca 180
ctttatgctt ccggctcgta tgttgtgtgg aattgtgagc ggataacaat ttcacacagg 240
aaacagctat gaccatgatt acgccaagct ctaatacgac tcactatagg gaaagctggt 300
acgcctgcag gtaccggtcc ggaattcccg ggtcgaccca cgcgtccggt tgaatgcact 360
gagtcccttg gtgtagtagc aataaggaaa aatgaaatta ctttcctgtg cacacagtcc 420
agcctaattg gtatgtgatg ttgcacttag cagccatgtg gtgggcatgt gtgactactc 480
tggttttcac tttagtttct aaacttttta tccctctcaa gtccagcatg gatggggaaa 540
tgtctctgga tccccacagc tgtgtacttg tttgcatttg tttccctttg agatttgtgt 600
ttgtgtcctg ctttgagctg taccttgtcc agtccattgt gaaattatcc cagcagctgt 660
aatgtacagt tccttctgaa gcaagcaaca tcagcagcag cagcagcagc agcacaattc 720
tgtgttttat aaagacaaca gtggcttcta wwaaaaaaaa aaaaaaaaaa aaaaaaaaaa 780
aaaaaaaaaa 790

<210> 12
<211> 554
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (552)
<223> n equals a,t,g, or c

<400> 12
ttcggcacga ggtctttacc tccaaactaa cttctttcct gaacagtaga atagtttttc 60
atactatcat catttggatg gagctcttta aactgacctc agagatcaga ttcataacct 120
tttgtccaga gcaatggatg cctttgctgg ttccccgttc tcattgatgg tccctaaatg 180
tgtacttata ctgttctgtc tagtctacag cttacagtgc attcagcctt attcaagctt 240
attgaattca gcctcgttgc cttatcacca cgggcttaaa ctagctaatc ttttattaat 300
tgtattctat cctcacatac attctatccc tttttcctca agtcatcctt ctaaactgca 360
catctgatca catttgaatc ttagctcctt tacttgcttt ctggccttgg gcagttgttt 420
ataatgctct gtgtcctcca ttcctcctgc ctcctactgt ggttcatggc ttaatatatg 480
taaactatgg cattacctta ctgcttaaaa ctcttaaatt taaaaaaaaa aaaaaaaaac 540
tcgaggggggg gncc 554

<210> 13
<211> 1106
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1017)
<223> n equals a,t,g, or c

<400> 13
gagcaagctc attttttttt cctatgaggc ttttgtaagt cctgacctgt atttactgtt 60
aacttcttag cttgggttca tgcaccccca gtcagtataa ctgtggacct catacccact 120
ttggcacagg cttggagtat ggatttatta caggtctgtt tctttttgtt tttctcccat 180
ttatggtcct ggacagaagg taagcttcct tgcaacttcc ctggtccggt gggtagagtt 240
ttcttgtccc ctttccagat gttaggtttt aaacaatgac tgttctttct ccatcatgta 300
gaccaaaggc caagttctgt gtccccatgg gagattaaaa cccaagcccc tatgtctagg 360
tccagtgccc actgatttct ctaattgtga gtctttctgc ttacctagta cctagagttt 420
ctcttcccaa gttttaaaaa tatcagttct aagtaggcct agcgtttcta catattttta 480
gggagagggg acccttttctg tggcagctca gtgttcagca ttcctgtaag ttagcatgct 540
ctgtgtatag cagatatcac tagtaatagc atttrgtaag tgatgttcac acatgctgct 600
gtcatgaaca ctatctcatg ttgtgtaaca ctttcatttt tccaagaact ttataatcag 660
ccgacttgaa actcacagtc gtcccctcag aaaggcaggg caaatgttgt tatttccaat 720
ttgtcagaag ctcagaaagc ttattctgtt gctgacagtc cttgcaaggg tcagaatcag 780
gaccggagcc ccagatgcgc tggtgtcact gatgtcccgt gccgggcatg agcccttctg 840
tgcaaggagc tccagtgtct cccggacagt gatgatgtga aaacatttag aaccgaccta 900
cacaataagg cagattttca ttctgtaccc aaaacaggaa cacagattta atgcagagca 960
aaagggcttt aatcaacaga tatgttcatt tttcacgtag acctatttta caagctnact 1020
tgtaagccag aaaatgacat tcgagatttt caagtgagaa caaatgattt ggtccaataa 1080
ttaaaaaaaa aaaaaaaaaa ctcgag 1106

<210> 14
<211> 568
<212> DNA
<213> Homo sapiens

<400> 14
gtggatccaa agaattcgca cgagtgccga tcagctcgga ccgaaaaaag tggtttwatt 60
cgggctggct tgttgcggtg tgagcggtct gttttatgcc atggcttttt ggttcactgg 120
tctgccgttg ctgagtttaa ttctgctgtg cattggcagg gtgtttctcg gcgtcggcga 180
aagctttgcc agtacggggt ctaccctatg ggggattggc ctggtggggc cgttgcatac 240
cgcccgggtt atctcatgga atggggtggc gacttacggt gcgatggctg ccggggcacc 300
gctcggtgtt tacctcaatc agcactgggg gttggctggg gtggcggcgt tgatcgtgtt 360
ggcggtggcg gtttcgctgt ggctggcgag tgcgaaccca acgtgacgat cgccgccggt 420
aagcgtattg cctttagcgc atgttggggc gtatttggac ttacggtctg ggacttgcaa 480
tgggtaccgt gggttttggc ggcacgagag tacttctaga gcggccgcgg gcccatcgat 540
tttccacccg ggtggggtac caggtaat 568

<210> 15
<211> 3692
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (518)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (606)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (639)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2303)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2441)
<223> n equals a,t,g, or c

<400> 15
aattcggcac aggttgtgtt tctmatgttc caggtccggc caggctggca gctcctgctg 60
gtcatgtttt cctcatgtgc tgtttccaac cagctcttgg tctggtaccc agcaactgcc 120
ttagcagaca acaaacctgt agcacctgac cgacgaatca gtgggcatgt gggcatcatc 180
ttcagcatgt catacctgga aagcaaggga ttgctggcta cagyttcaga agaccgaagc 240
gttcgtatct ggaaggtggg cgacctgcga gtgcctgggg gtcgggtgca gaatattggg 300
cactgctttg ggcacagcgc ccgtgtgtgg caggtcaagc ttctagagaa ttaccttatc 360
agtgcaggag aggattgtgt ctgcttggtg tggagccatg aaggtgagat tctccaggcc 420
tttcggggac accagggayg tggkayccgg gccatagctg cccatgagag gcaggcctgg 480
gtgatcactg ggggtgatga ctccaggcat cggctgtngc acttggtagg gcgtgggtac 540
cggggattgg gggtctcggc tctctgcttc aagtcccgta gtaggccagg tacactcaag 600
gctgknactc tggctggctc ttggcgactg ctggcagtna ctgatacagg ggccctgtat 660
ctctatgacg tcgaggtcaa gtgctgggag cagctgctag aggataaaca tttccagtcc 720
tactgcctgc tggaggcagc tcctggtccc gagggcttcg gattgtgtgc tatggccaat 780
ggggaaggtc gtgtcaaggt tgtccccatc aacactccaa ctgctgctgt ggaccagacc 840
ctgtttcctg ggaaggtgca cagcttgagc tgggccctgc gtggttatga ggagctcctg 900
ttgctggcat cgggccctgg cggggtagta gcttgcctag agatctcagc cgcaccctct 960
ggcaaggcca tctttgtcaa ggaacgttgt cggtacctgc tgcccccaag caagcagaga 1020
tggcacacat gcagtgcctt cctaccccca ggtracttcc tggtgtgtgg tgaccgccgg 1080
ggctctgtgc tgctattccc ctccaracca ggtctgctca aggaccctgg ggtgggaggc 1140
aaggctcggg ctggtgctgg ggcactgtag tgggtagtgg tagtagtggg ggtgggaatg 1200
ctttcactgg gttgggccca gtgtctaccc tgccctctct gcacgggaag cagggtgtga 1260
cctcagtcac atgccatggt ggctatgtgt ataccacagg gcgtratgga gcctactacc 1320
agctgtttgt acgagacggc cagctccagc cagtcctaag gcagaagtcc tgtcgaggca 1380
tgaactggct agctgggctc cgtatagtgc ccgatgggag catggttatc ctgggtttcc 1440
atgccaatga gtttgtggtg tggaaccctc ggtcacacga gaagctgcac atcgtcaact 1500
gtggtggagg gcaccgttcg tgggcattct ctgatactga ggcggccatg gcctttgctt 1560
acctcaagga tggggatgtc atgctgtaca gggctctggg tggctgcacc cggccacacg 1620
tgattctccg ggagggtctg catggccgtg agatcacttg tgtaaagcgt gtgggcacca 1680
ttaccctggg gcctgaatat ggagtgccca gcttcatgca gcctgatgac ctggagcctg 1740
gcagtgaggg gcccgacttg actgacattg tgatcacatg tagtgaggac actactgtct 1800
gtgtcctagc actccctaca accacaggct cagcccacgc actcacagct gtttgtaacc 1860
atatctcctc ggtacgtgct gtggctgtgt ggggcattgg caccccaggt ggccctcagg 1920
atcctcagcc aggcctgact gcccatgtgg tgtctgcggg ggggcgggct gagatgcact 1980
gcttcagcat catggttact ccggacccca gcaccccaag ccgcctcgcc tgccatgtca 2040
tgcaccttts gtcccaccgg ctagatgagt attgggaccg gcaacgcaat cggcatcgga 2100
tggttaaggt agacccagag accaggtaat atatgctcct gggcagggtg tggtatgggt 2160
catgcagatg ctcccaggct tgcaggctcc acctgacagc tgcatgttgt ctctgcaggt 2220
acatgtccct tgctgtgtgt gaacttgacc agcccggcct tggccccctt gtggctgcag 2280
cctgtagtga tggggccgta agntctttct tttgcaggat tctgggcgga ttctgcagct 2340
ccttgctgaa accttccacc ataagcratg tgtcctcaag gtccactcct ttacacacga 2400
ggcacccaac cagaggcgga ggctcctcct gtgcagcgca ntactgatgg cagcctggct 2460
ttctgggatc tcaccaccat gctagaccat gactccactg tcctggagcc tccagtggat 2520
cctgggcttc cctaccggct tggcaccccc tccctgactc tccaggccca cagctgtggt 2580
atcaacagcc tgcacacctt gcccacccgt gagggccacc atctcgtggc cagtggcagt 2640
gaagatggat ccctccatgt cttcgtgctt gctgtggaga tgctacagct agaagaggct 2700
gtgggagagg ctgggctggt accccagctg cgtgtgctag aggaatactc tgtcccctgt 2760
gcacatgctg cccatgtgac aggcctcaag atcctaagcc caagcatcat ggtctcagcc 2820
tccattgatc aacggctgac cttctggcgt ctggggcatg gtgaacccac cttcatgaat 2880
agcactgtgt tccatgtgcc tgatgtggct gacatggact gctggcctgt gagccctgag 2940

tttggccacc gttgtgccct tgggggtcag gggcttgagg tttacaactg gtatgactga 3000
ggtatcctgc ggtggctggc gtgctgggca tggggcctgc tcacagacag catggagcag 3060
ggaagggctg tctgtgccca tgctcagcat gccttgaggg gaggaggtgg tggccgtggg 3120
ttcctgatgt cggtgcagga gctgaaggtg agtggagtgc tgccaagaat atgcccgact 3180
ccccatgaca agacagaact ttgtaacaaa cagtaccaat ttattttggc cgtgggtttt 3240
tgctttttt ccagttgatg actttgtgaa cattcccagg tattggagcc tctgtggcct 3300
taaatgtggc tcagtggagg gagacccagc atagccaggc cagtatggag cacctcacgc 3360
acagctctca gaagctgcag gcggacgaac atctgaccaa agaggtgtgg tcgaggctcc 3420
tgaaagagaa agggcctgct ggtctcatcc tctgcttcct ttgcctttac cctatacctc 3480
tctgcacgtc ccaccccgtt ttgctgtgtg ctcaccccca ggatgtgtac ccggttgtag 3540
taggagctga aatccatgct gagctgtacc aggaacttgc atatctagag acagagactg 3600
agtcactggc ccatctcttt gctcttgtgc cccaggccag aataaagaat agagtgtara 3660
gtraaaaaaa aaaaaaaaaa aaaaaactcg ag 3692

<210> 16
<211> 1428
<212> DNA
<213> Homo sapiens

<400> 16
agcagggttt gagcctcctg gagacattga atttgaggat tacactcagc caatgaagcg 60
cactgtgtca gataacagcc tttcaaattc cagaggagaa ggcaaaccag acctcaaatt 120
tggtggcaaa tccaaaggaa agttatggcc gttcatcaaa aaaaataagg tactgatggt 180
tggcgtgaaa tgagttttct aaggtgtgga gattttgact tgatctttta gtcttagaaa 240
aactaagatc ctaaacctgt agtttcagaa tgcaaaagaa gaagctagtg tgctacctta 300
tgttgagaca gtatttcttt ttggtggtgg tatctttgcc atggccctgt gtcttatttc 360
agatgcatta tcctcgtacc gtgactccca cactaacaga gtactgacct ctccaccgtt 420
tcgcctcatg cctttccctc cttcctctcc tagactgctg gttaccttgg ctgggagaga 480
ggatgtagtg ggacattcct gtaacacttt atccgcacat ctactggaaa tcgttaccat 540
gttaataact tggttttgaa ttcatgttaa catgtgtacc catgaacatt tttcattttc 600
ttttcatagt gcgatacata ggtgcatgac agcattaacc tggggacgta gaatatgatc 660
aaggcagcat tactgcttta actttagaat gacttactat ttattaattt aaacagactg 720
ctgtttccac aaccttagca ttgaaggtct ttcattttct cccatcaagc tatgttagtt 780
taggtaatgt agaaatattt accctctggc ttaagctggt ttagagtaac taactagagc 840
tatagtttgc atgggaaagt ctgcacgagc ttcttgtcag atatttcttg ctcttctgtc 900
gcattactta ctaaacctcc caactctcat catattcttc atttaaccac ctcctacatg 960
ttttcttttg gaccatggcc taaaatttaa ttgtttgtgt tttacttgcg ttggatttca 1020
aatattattt gatgcttatt tttgttttgt gtcttcttgt ttctgatttt tactctgtca 1080
cggctccatc tcttacatgt agcttatgtc ccttttaaca tccccccatc agcctccccc 1140
tccccctcct gcctctgcct caccctctgc tgttcccaac ggcccccagt ctcccaagca 1200
gcaaaaggaa cccctctccc accgcttcaa cgagttcatg acctccaaac ccaaaatcca 1260
ctgcttcagg agcctaaagc gtggggtaag ttctgctccg gaatcctgtc tctctggcgt 1320
gctttggttg catgtttggt tctgcataac taattttgtt tgtgaatgaa tccattgtgt 1380
tttcccataa catataaaaa agttaaaaaa aaaaaaaaaa aactcgag 1428

<210> 17
<211> 1489
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (345)
<223> n equals a,t,g, or c

<220>

<221> misc_feature
<222> (549)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1408)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1477)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1488)
<223> n equals a,t,g, or c

<400> 17
ggagganagg atgatgatga aggaccgtac acaccattcg acacccccctc gggtaaactg 60
gaaacagtga aatgggcgtt cacctggccg ctgagtttcg tcttatactt cactgtaccc 120
aactgcaaca agccgcgctg ggagaaatgg ttcatggtga cgtttgcttc ctccacgctg 180
tggatcgcag ccttctccta catgatggtg tggatggtca caatcattgg ttacaccctg 240
gggattcctg acgtcatcat ggggatcacc ttcctggctg ctgggaccag cgtgcctgac 300
tgcatggcca gcctcattgt ggccagacaa rggatggggg acatngctgt gtcaaactcc 360
attgggagca acgtgtttga catcctgatt ggcctcggtc tcccctgggc tctgcagacc 420
ctggctgtgg attacggatc ctacatccgg ctgaatagca gggggctgat ctactccgta 480
ggcttgctcc tggcctctgt ttttgtcacg gtgttcggcg tccacctgaa caagtggcag 540
ctggacaana agctgggctg tgggtgcctc ctcctgtatg gtgtgttcct gtgcttctcc 600
atcatgactg agttcaacgt gttcaccttt gtgaacctgc ccatgtgcgg ggaccactga 660
accgccgggt gcccacagar gctcagctcc ttctttttctg tgcaatacga racccggccg 720
cacccgartc acacaggccc ctggggccac ggcgttcgtc tctcctgtgc tgtcctcagg 780
cctccgctcc tgttttggtg gcccargctc tcccctgccc catcctcgct cccccacctc 840
cttgggtcat gcccacccac cctttcctgc ctcctccgtg tkaagacatc caacatccac 900
gtgacttttc cagctccatt tttgaacagt gactgagatt ctagaaaaac ccggctgcta 960
actggcctga gccaggcaac actgattcca atcccctyytc ctttttttaag ttatttgatg 1020
gaagactcac ctaatttgtg acctgagact gttgaagaaa tagagaggag ggggcccgtt 1080
gattacagag agcatttggg attttgtttg gtttggagat gatgcctagg ttactgggtt 1140
tgggggggatt gttttctttt gggggccttc ccctttttact ccttttcttc cagagatcaa 1200
gagcttctct tgcatcttct tccactgggc tctggattaa tcaattaccc aaaggctgca 1260
cctgccgtgt tgtctgggct tgcatcccag atgtgttgga gtatgcatgg atgtagtgct 1320
ttttagagga gccactgggc aaggccacca agaacaaatg catgacattt tatagccaag 1380
gacgcctcac taaagtctta tgggcgtncc ctggggttgg gggggcacaa ggttttggag 1440
gaagaagaca acttcctcat tccatcatca ccatctnttt ctcactang 1489

<210> 18
<211> 1940
<212> DNA
<213> Homo sapiens

<400> 18
acgcgtccgc ttcccagaaa atagatgaca tcagtgcccc ttgctacttt ctcagtcctc 60
actattgctt tgagggccca ggtactgaaa ctggttgtct tgagttttgt gtcagctttt 120
tctccagtcc attatccccc tcccttgctt ctgaagcagt ctaggttaaa ctagccaggc 180
aggtagttgt ggaactggtg attttcaaaa gccccacttt agagatcagg ccacagcttt 240
ttatatcgca caggacacat cagcctgagc tgctgcctca tgcctgtttc cccaggaacc 300
tcactccttt ggtagaacct tgggatttta gaaattgtgg ctttccataa ctcatttact 360
ccaacagttg aagttacaca cattgctccc aaatttggaa atagaccaca gtaccttacc 420
tttcattccc catctggcct ttacctttctt tgcttcagtg gttgaaaaca gttgccatat 480
tcaaagtata gtagatttca acctcacaca aatgacaagt cccattttac aatcctagga 540

aggcccacca atttcatttc acgcgccagg gcggctgcag ttggaggccg agggcagccc 600
tctgctcact gaatgtcttg catgtgctga ctgctgcccg cagtgctgaa catgccccac 660
cgcccaggcc cagcactgct tgttgggtca gcatctagtg ctgctgtcac atctttgtct 720
gcacagccag taggattgcc tcagccaggg ggtttatcag aaggtgtgca aggcctttgg 780
gggaactgag cccctatagt gggcagtctc ctttaccttc ccacctccct gaaaagcaca 840
gaagacagtg ccttggtttg tgttttgaag caaacaagtc agctttctgg ctttgcccca 900
aaactgtgat ggaacataat aaaactggag atatggtttt taacactgca aaaaggaaaa 960
agcatcaagt ttctacttct ggctggaaag caaaaccaat ctcagctgac aaggctgggc 1020
aaactaagtt ttcctgagcc cattttcctt tgagccctga cctagcctgg ccttacctca 1080
ttaaggtttg gttaaagcag tggaaaggag gaggaggcag gggtggatgg gggtgtgggg 1140
aggggatgag cactctgcag ccgattaatc tgttggtagg ggcccagctt cttgggagtg 1200
cttattcagc ccaagagtgg aggctgttta cagcgagccc tggagatggc agcttgtctc 1260
cagctgggga ggggtcaggc ccctaaattg aagaccactt tggtagcaga actgtaggga 1320
ctggtgagtc aactcacaga ttctgcagca gctgctccac ccacaataaa gcaaacgccg 1380
acaggctaga ccccagattg caggggctgc cactacaagg tgggaccaca ggctgcctca 1440
ccgggattgt ttgccactaa atagctggag tcacagattg agataaatgc caccttcaag 1500
gttgcagtga aaagcataat cctatgtgat gaatttatat gtgttatttt ttaaaaagct 1560
attttattac tgcatgttcc cgtcccgtct tgtgaatgtg agtccccgcc accacgtgag 1620
gtgcagtcgt tgcagcggct ggtgcaggag tgccactggc gcgtgtgtga tagcatctcg 1680
taggtgttgc tgcacaagag ttaaccagag tcaatgccaa acacatagta tgagaagtgt 1740
acttttaag aaattaattt atttgagttc aaatattttt gaaatataaa aattggttgt 1800
attttttaaa gctataattc ttgtagacat tctgtggtta aaaatttgat tgtgcttatt 1860
aaaaatggtc atctatgttt tgcacttcag ctacgtgaaa ataaaatttc tttgggaagg 1920
tgaaaaaaaa aaaaaaaaaa 1940

<210> 19
<211> 1592
<212> DNA
<213> Homo sapiens

<400> 19
ccacgcgtcc gagcaattta taaattgata ccagtaatac ggtgccttga caaactagat 60
tgtttgagcc atgttatgtg acctcatctt gttatttaat ataaaaatgg caatttatca 120
tctgataata ctgcagtttt tctgtagtgt ttgctctgag cctgacactg cactgagtat 180
ttccccactg taggtcatat tattgtcccc attttgccga tgaagacctg agaggtgggt 240
aggggcagga aagtggtcag tgaggtgctg gtggggtgga ggggccaagg atcagctgag 300
gctttctgac ctgagagctg gcagtgccca cccaacagct ctacctgtta catttctgtt 360
atcctcatgc catcctctga ataaacatcc atcacgctgg tccttggtac ccacgacaat 420
gacagcttgt cagccctggg ccagtgctgt ggcacgtgga catggggaag cccagaggtg 480
gcaaggatgg agtgggttcc atgtggggag gataagggtg catggagctg gcaggggagt 540
taagaccggg aaggccagtg ggagccagcc cgggggcagg ggacctggaa tgccagcatc 600
agaagacttc cccgcatgag gctcttggta actggggctc acctcccttc tgtctgctgc 660
aggatggggt gcatgaagtc caagttcctc caggtcggag gcaatacatt ctcaaaaact 720
gaaaccagcg ccagcccaca ctgtcctgtg tacgtgccgg atcccacatc caccatcaag 780
ccggtgagta ggggaggtcc cagtttccct gggggctgac ggatgctgcc ccaacattgc 840
cctaacagcc tcctgtcttc ccaaggttgg gcagggtgag cttggggtga aagggagctg 900
actggccacc aacagtgtcc tgactcgact ctccgggacg cagcgccagc cagcatgcat 960
aggggcaaag aagtcatctc tctttcctgc agcccaggct tggcccctca gcctgagctc 1020
caccaaacag gtgtgagtga gcatctcagg cctccggcct gggcagaagc aaaagcagtg 1080
ctgagaaacg agtgaacagt aatgatagca gctgaagtga caatgtaatg gtagtatcag 1140
cagcattgca aaaatacagt aacaattgtc atactaatag taccaaccat aattgcgtga 1200
gtataagacc aagagtagca gcaggaacaa cagcaagagt tgtaaaaaga gaagcagtca 1260
tgctaggaga ggtatttacc aacttctttt atgtttatac aaagctgact atgaacccag 1320
cactgttgta agcctttacg gttattaaca ccctaatcct cacaataatc ctattgtgtg 1380
acacacaaat acattcttct tgaaaataaa aacacaggcc aggtgcagtg gctcacactt 1440
gtactcccag cattttggga ggctgaggca ggaggattac ttgagcccag gagttcgaac 1500
tgcatgagct atgatcacgc cactgcactc cagcctgggc aatacaggga gaccctgtct 1560
ctttaaaaaa aaaaaaaaaa aaaaaaaaaa aa 1592

<210> 20
<211> 1410

<212> DNA
<213> Homo sapiens

<400> 20
gcccacgcgt ccgagaaaaa tgctgctcag tttttattgt ctaccaatgg taagtataca 60
tatttttctt ccatgtgccc actgtgtgta cctgttgcac atatcctgta gcctaggaga 120
ggaatcattt aacagagata cttgtaaaaa ggacttttgt ttttctatac agaatgtaaa 180
ctctactttt ttactgtcac ttgcagtttt tagattctct gaaagattct ctgatagcaa 240
ttttttgttt actacacctc caatttgtag tgaaaagaat gggctgctat accattggat 300
ttaggtcagg tactatttct gtcatttctc agtctcgtaa tcttgggcag gttactaaca 360
ctgaattgaa ttttcctcag cagcaaacta gagatagcaa ttttttatta tagtattatt 420
atgaatatta aataacttca catacatcat gagtgcaagt gctcaataaa tgttaattta 480
ttcctccttt ttaagtgttt gtaaactaca cagagtatct caaactgcag atacaaaata 540
ctcaaaggat ggtctccatt ccaggatacg ctataggaga gcactttctt acttgatcac 600
cattagcata ttgccttctt cccagcaatc cacatggctg gaaggagatt cctctcctac 660
tgtttacttg ccaagggaac atttttttgtt gtttttttgag acaatgtctg tcgcccaggc 720
tgaagtgcat tggtgtaatc acagctcact gcagcctcga cctccctacc tcagtctcct 780
gagtagctgg gaccacaggt gagtgccacc acacccggct aatttttttaa aaacattttt 840
gtagagcctg ggtaacatgg ggtggaacaa gcctgtagtc ccagatactc aggaggctga 900
ggtgaaagga ttgcttgggc cagggaggtc aaggctgcag tgagccgtga aaggccactg 960
cactccagcc tgggtgacag aatgagacct tgtctcaaaa aaaaaaaaaa agtttcttgg 1020
aacctatacg ttttttttttg ttttttttttt gaaaagccag accttgtgcc cttgttttga 1080
acaccgactg ggaagatggg gcttaggtaa cagccaaacc tggctgtcag ctgtgtggga 1140
gccaccaccc tctctgggaa gagttcctgc ttctgtatgg caagcataaa tcaagctcag 1200
tctgggttat ggagaagttg aaaattgttt tgttcctcat tagtttataa ttgtatgaaa 1260
tacgatttta atgaaaactt ttcagaattc acgtttgtgt agatatttca gagaaccatt 1320
tttactttac atcctaaaac tgccttttcc tatggttttg tcaataaaac actatgatgt 1380
tgaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1410

<210> 21
<211> 1727
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (979)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1047)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1135)
<223> n equals a,t,g, or c

<400> 21
ccacgcgtcc ggccatggtt gccactgtct gtggcctcct ggtcttcctg agcctgggcc 60
tggtaccccc agtccgctgc ctgtttgcac tcagcgtgcc caccctgggt atggagcagg 120
gccgccggct gctcctgtcc tacagcactg ccaccctggc cattgctgtg gtgcccaacg 180
tcctggccaa cgtgggtgcg gccgggcagg tgctgaggtg tgtcaccgag ggctccctgg 240
agagtctcct caataccact caccagctgc atgcagcatc cagggctctg ggccccacag 300
gccaggcagg cagccggggc ctgacatttg aggcccagga caatggctct gccttctacc 360
ttcacatgct cacggtcact cagcaggtcc tggaggattt ctctggcctg gagtccctgg 420
cccgggcagc agcgctaggg acccagcgag tggtcacagg gctgtttatg ttgggcctcc 480
tggtggagtc ggcatggtac ctccattgct acctgacaga cctgcggttt gacaatatct 540
acgccactca acagctgacc cagcggttgg cacaggccca ggctacacac ctcctggccc 600
ctccacccac ctggctgctc caggcggctc agctgaggct gtcacaggag gagctgttga 660

gttgtcttct aaggctgggg ctgcttgccc tgctcctcgt ggccacggct gtggcggtgg 720
ccacagacca tgtagccttc ctcctggcac aggctactgt ggactgggct cagaagttgc 780
caactgtgcc catcacgctc acggtcaagt atgatgtggc atacactgtc ctgggcttca 840
tccctttcct cttcaaccag ctggctccgg agagcccctt cctctccgtc cacagctcct 900
accaatggga gctccgcctc acctccgccc gctgcccact gctacccgcc cggcgtcccc 960
gcgcagctgc cccgctggnc gcgggggcgc tgcagctcct ggcgggctcc acggtgctcc 1020
tggagggcta cgcccgccgc ctgcggnatg ccatcgccgc ttccttcttc acagcccagg 1080
aggcgaggag gatccgccac ctacacgccc ggctccagcg aagacacgac aggcnccaag 1140
gccagcagct gcccctaggg gatccttctt gcgtccccac acccagacct gcctgcaagc 1200
ctccggcatg gatagcctac aggctggatg ccttaagaac cgagagcagt gagggagaag 1260
ggaaagagct ttggagttgc agagacctga gttgtcacct tggtcctgtg ccgcctccct 1320
gtgtgacctt gggtaagtca cttcacctct ctgagcctcg gtttctacat ctgcataacg 1380
acagcatatt taccattgat gtgacctact tcccacgcag ggatgtggtc aggatggaag 1440
gaaatactgg gcatgatagg cctggataac cggtaaagaa ccatgcaaag gcgaagacaa 1500
ggagtgcaga gagagctcat ggttcctcca ggctggttgg cgatcaggct catctcatct 1560
gcaccaactg ctctacttgt tagatggaga ccttgcatca tgaatttctc gaaatgctcc 1620
tggaacttat ttatatgcct caaaatcctc taaactcatt tatagtaacc catagtttta 1680
attttataaa taaacgtatt tattaaatct taaaaaaaaa aaaaaaa 1727

<210> 22
<211> 1218
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (389)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (740)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1048)
<223> n equals a,t,g, or c

<400> 22
gaaaatagaa taaatgccca tccataagac taaaatttct tgtgtttttc tccttctgag 60
tttaaaatgg cactggatga caaatggaaa gcttgatgct gctcttaatg tgccgctagg 120
attccgggga tttcaaagcc agtggacggg aggtggcctc tgccagtgtc tgtctggtgt 180
ctgtctgtgt cactgtggtg ctgcctgggc cacagaccta ggcaggaccc tgggtgatgg 240
agctcctgtc tggtgggtgt gtgtgggcag tgctgttcct gtccacgtta gaaaagccct 300
cttactttac actgagtcat gctccctctc caccacggac cgcagtcccc ttccctagtg 360
actcgctgtc cccttccttt gttgcgcant ttctggcttt aaatgaggag agcttaagaa 420
tggatgggga gctcagcact cacagtaact gttggtgaac tcagggcctg ctacgtctgg 480
aacacatcaa gccatttagt gggtgaggtc attcactgtt tttaaatgct gctgcagctc 540
ttatttctca tgaagccctt tatacctatt aaatacttca tagtattgaw taacttagct 600
gsytgctcct ctctgtcatg gcacctttg ctcatgtgga ctttawggtg cagaaacacg 660
aatcgattgt cgtaatgaac aamamccctc tgaagtggcc acggcgggta tgattcgtcc 720
cagttcacgg gcgagtaacn gaggtgcgca gtggcggggc agctggccca ggtcgtgcag 780
ctgctgtgcg tgagccagct cgctcctgag tttccttttg tttgacagca ttttgtttac 840
agacaccaca ccaatccttg gtcttggata catcagaaaa gttggagttc tagaggtggg 900
tggaggcagg acttgtaccc tctccctgca gcaaagacaa attcattaag catttggaac 960
acttgttaag ttcagtttgt ctctctctaa aagttatcac tagatgactc tctcattttt 1020
gtgtgtgcgt gttttagatt tgcctgtnac ttacgaccag ggatactggc tttctattta 1080
tggtagtaat agcagttctc cttttaaata aacttatttt cagccaaaag agtgattagg 1140
tctatcaaaa aatgataagg aaataaacag tacagatcgt ctatatttat ggcaaaaaaa 1200
aaaaaaaagg gcggccgc 1218

<210> 23
<211> 712
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (28)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (77)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (117)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (124)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (696)
<223> n equals a,t,g, or c

<400> 23
taggcccggg acggttacaa tttacncngg aaccgctttg cccataggct ttgcaaaaag 60
ctttttaggt gccactntag aaggtacccc tgaaggtacc ggtccggaat tcccggntgg 120
accnacgcgt ccgaggaggt cytttaggaa gactctcaaa ggcaaatccc tgatcccccg 180
ccccaccctt agccctgccc tctcaccaga gcaaaattca ctggggactt ttcccaccac 240
acatggaaat ctgtccactc ggaatacctc tgttttccat ttcaaattgt agggggaggg 300
gatggaacac ttccagtgat ggtaagagat ctgttatgaa acgaaacacc ccccgtgtta 360
ataacttggt ctgaaatctg tttttatgag ccgggccccc tgtgcctcta gtatacttgt 420
attgactctc atagttaccc ttttagtttt actgtgttct gtgaaaattt gtaattggtt 480
gagaatcact gtgggcgtcc attcttattc aactaaatct ccacaggttt tttgagctgg 540
tgtggattag tttaactctt gtattcaacc attagtgcta ccaccttctc acattacaat 600
acaattactg gaagcaagta ctgcatttcc tatgcaacaa aaaaggaaaa ataaaaaatt 660
gctaatgcta aaaaaaaaaa aaaaaaaaaa aaaaanaaaa aagggcggcc gc 712

<210> 24
<211> 1422
<212> DNA
<213> Homo sapiens

<400> 24
gtctccgctc ctgtgcccgg gaagatggtg ctaggtggtt gcccgaatca cgccattttt 60
taacatctct ttttgatcaa acaagaaaaa gcatttggga aatgcaaaga ggactgagaa 120
tactttggct taaattttgc ccccagaatc ttgttgtttg cctactgaag agatgaaacc 180
atggcagaag tagaatcctt atagaaacag gaccagaaac acctcccttc tccaacaaaa 240
ggttcatttt ggtggctgtc cgtttgacct gctgtgcttc agtttaattg gcttggaaag 300

gggtcagcag ggtgaaaccg aaccccagaa aacttgatga agaaatgtct tttgcccgtt 360
ttgattacgt gcatgcaaac agcgatttgc aaagaccgta tgatgatgat catgatctta 420
ctggtgaatt acagacctga tgaatttata gaatgtgaag acccagtgga tcatgttgga 480
aatgcaactg catcccagga acttggttat ggttgtctca agttcggcgg tcaggcctac 540
agcgacgtgg aacacacttc agtccagtgc catgccttag atggaattga gtgtgccagt 600
cctaggacct ttctacgaga aaataaacct tgtataaagt ataccggaca ctacttcata 660
accactttac tctactcctt cttcctggga tgttttggtg tggatcgatt ctgtttggga 720
cacactggca ctgcagtagg gaagctgttg acgcttggag gacttgggat ttggtggttt 780
gttgacctta ttttgctaat tactggaggg ctgatgccaa gtgatggcag caactggtgc 840
actgtttact aaaaagagct gccatcatgg cccagggagg cgggtgaaag ctccgtcttc 900
tgaattcatc tctacaggct caaaactcct ctttgatatc agacctgatg ttattttcct 960
tcttttggag ggcatttgtt tggttaagaa ggcttctttg gactttggaa tttcaaccca 1020
gattttacct tgcagacgga atgacaagca aaaagtgttg tggggaatca aatttgttcc 1080
tttcctcatg cacaaaacat aaaggatagt ggcgagttta caagctgtgg atgggtttcc 1140
atagtcttcc tttctgtaca ttgctatatc ttcagtcctt tggagcaagt ggacctaaca 1200
agttgagcaa aatgaatatt tggatccatg ttcctcttgt gaccctgagt cttcatgcaa 1260
ggagatctga agctgaacaa tgaaaatctt cagcagaaat agaaatggcc gtggattgta 1320
atacacactg aaattctgac tttctgaatt taaatgtaga ataaatttta ccaacttgga 1380
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaactcg ag 1422

<210> 25
<211> 1038
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (806)
<223> n equals a,t,g, or c

<400> 25
ggcacgagtg gctgcagcgg ggcccgcgtg gtgcctcctg aggcggcccc cggatgaaga 60
gatctgggaa cccgggagcc gaggtaacga acagctcggt ggcagggcct gactgctgcg 120
gaggcctcgg caatattgat tttagacagg cagacttctg cgttatgacc cggctgctgg 180
gctacgtgga ccccctggat cccagctttg tggctgccgt catcaccatc accttcaatc 240
cgctctactg gaatgtggtt gcacgatggg aacacaagac ccgcaagctg agcagggcct 300
tcggatcccc ctacctggcc tgctactctc taagcrtcac catcctgctc ctgaacttcc 360
tgcgctcgca ctgcttcacg caggccatgc tgagccagcc caggatggag agcctggaca 420
cccccgcggc ctacagcctg ggcctcgcgc tcctgggact gggcgtcgtg ctcgtgctct 480
ccagcttctt tgcactgggg ttcgctggaa ctttcctagg tgattacttc gggatcctca 540
aggaggcgag agtgaccgtg ttccccttca acatcctgga caaccccatg tactggggaa 600
gcacagccaa ctacctgggc tgggccatca tgcacgccag ccccacgggc ctgctcctga 660
cggtgctggt ggccctcacc tacatartgg ctctcctata cgaagagccc ttcaccgctg 720
agatctaccg gcagaaagcc tccgggtccc acaagaggag ctgattgagc tgcaacagct 780
ttgctgaagg cctggccagc ctcctngctg ccccaagtgg caggccctgc gcagggcgag 840
aatggtgcct gctgctcagg gctgcccccg gcgtgggctg ccccagtgcc ttggaacctg 900
ctgccttggg gaccctggac gtgccgacat atggccattg agctccaacc cacacattcc 960
cattcaccaa taaaggcacc ctgaccccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1020
aatttggggg ggggcccc 1038

<210> 26
<211> 1906
<212> DNA
<213> Homo sapiens

<400> 26
ccgcaacgca gtgagctcgc ggccgcgagc aacaggccgt gccgrgtttg catttcctta 60
ctgctttgtc ttgaagacag aacgatgcca aagaaagcaa agcctacagg gagtgggaag 120
gaagaggggc cggctccctg taagcagatg aagttagaag cagctggggg gccttcagct 180
ttaaactttg acagtcccag tagtctcttt gaaagtttaa tctcgcccat caagacagag 240
actttttca aggaattctg ggagcagaag ccccttctca ttcagagaga tgaccctgca 300

ctggccacat actatgggtc cctgttcaag ctaacagatc tgaagagtct gtgcagccgg 360
gggatgtact atggaagaga tgtgaatgtc tgccggtgtg tcaatgggaa gaagaaggtt 420
ttaaataaag atggcaaagc acactttctt cagctgagaa aagattttga tcagaaaagg 480
gcaacgattc agtttcacca acctcagaga tttaaggatg agctttggag gatccaggag 540
aagctggaat gttactttgg ctccttggtt ggctcgaatg tgtacataac tcccgcagat 600
ctcagggcct gccgccccat tatgatgatg tcgaggtttt catcctgcag ctggagggag 660
agaaacactg gcgcctctac caccccactg tgcccctggc acgagagtac agcgtggagg 720
ccgaggaaag gatcggcagg ccggtgcatg agtttatgct gaagccgggt gatttgttgt 780
actttcccag aggaaccatt catcaagcgg acactcctgc ggggctggcc cactcgactc 840
acgtgaccat cagcacctac cagaacaatt catggggaga tttccttttg gataccatct 900
cggggcttgt atttgatact gcaaaggaag acgtggagtt acggaccggc ataccccggc 960
agctgctcct gcwggtggaa tccacaactg ttgctacaag acgattaagt ggcttcctga 1020
ggacacttgc agaccggctg gagggcacca aagaactgct ttcctcagac atgaagaagg 1080
attttattat gcacagactc ccccccttact ctgcgggaga tggggcagag ctgtcaacac 1140
caggtggaaa gttaccgagg ctggacagtg tagtgagact gcagtttaaa gaccacattg 1200
tcctcacagt actgccggat caagatcaat ctgatgaagc tcaagaaaag atggtgtaca 1260
tctatcattc cttaaagaat agtagagaga cacacatgat gggaaatgag gaggaaacag 1320
agtttcatgg acttcgcttc cctttgtcac atttggatgc actgaagcaa atttggaata 1380
gtccagctat ttctgtcaag gacctgaaac ttactacaga tgaggaaaag gaaagcctgg 1440
tattatccct ctggacagaa tgtttaattc aagtagtcta gtgcctttgc agaatcaaat 1500
gcctactatt ttatatgcat atattaaaag aaaagcaaag acctgagccg aggagaggat 1560
gaattcaagt ttccttacct gcgtatctac taacaaacat gagacctccc tgttacaggt 1620
ggtcagttgg ccaaatgtac taacgggcac atgaaagaaa gaacagcaaa ttaccaagtg 1680
tctcagaaaa tgacaaaacc atattttgac aagtttattt aatccagtgt ggtagaaaag 1740
gcacaattcc aatgtatcat ttagaattga atgtcattaa cctggctttg ttctttggaa 1800
gaaacaactt ctttaaagag cttctttggc tctagaaaaa tttcaaacaa ttaaaataag 1860
aaaaaatttt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ctcgag 1906

<210> 27
<211> 847
<212> DNA
<213> Homo sapiens

<400> 27
tggtggcggc atacatcgcc ttcacaatgg cgctctgcag ctgcgtgttc tgcagcgtgt 60
cgagcatctt catctgctcc atcacgctgt aaaacacatt tgcaccgcga gtctgcccgt 120
cctccacggg ttcattgcgg cgcagtgtag acctgggarg atggscggcc tgctgctggc 180
tgcttttctg gctttggtct cggtgcccag ggcccaggcc gtgtggttgg gaagactgga 240
ccctgagcag cttcttgggc cctggtacgt gcttgcggtg gcctcccggg aaaagggctt 300
tgccatggag aaggacatga agaacgtcgt gggggtggtg gtgaccctca ctccagaaaa 360
caacctgcgg acgctgtcct ctcagcacgg gctgggaggg tgtgaccaga gtgtcatgga 420
cctgataaag cgaaactccg gatgggtgtt tgagaatccc tcaataggcg tgctggagct 480
ctgggtgctg gccaccaact tcagagacta tgccatcatc ttcactcagc tggagttcgg 540
ggacgagccc ttcaacaccg tggagctgta cagtctgacg gagacagcca gccaggaggc 600
catggggctc ttcaccaagt ggagcaggag cctgggcttc ctgtcacagt agcaggccca 660
gctgcagaag gacctcacct gtgctcacaa gatccttctg tgagtgctgc gtccccagta 720
gggatggcgc ccacagggtm mwgtgacctc ggccagtgtc cacccacctc gctcagcggc 780
tcccggggcc cagcaccagc tcagaataaa gcgattccac agcaaaaaaa aaaaaaaaaa 840
actcgag 847

<210> 28
<211> 985
<212> DNA
<213> Homo sapiens

<400> 28
ccacgcgtcc ggcacagatg agagcgctcc gaagactgat tcagggcagg atcctgctcc 60
tgaccatctg cgctgccggc attggtggga cttttcagtt tggctataac ctctctatca 120
tcaatgcccc gaccttgcac attcaggaat tcaccaatga gacatggcag gcgcgtactg 180
gagagccact gcccgatcac ctagtcctgc ttatgtggtc cctcatcgtg tctctgtatc 240
ccctgggagg cctctttgga gcactgcttg caggtccctt ggccatcacg ctgggaagga 300

agaagtccct cctggtgaat aacatctttg tggtgtcagc agcaatcctg tttggattca 360
gccgcaaagc aggctccttt gagatgatca tgctgggaag actgctcgtg ggagtcaatg 420
caggtgtgag catgaacatc cagcccatgt acctggggga gagcgcccct aaggagctcc 480
gaggagctgt ggccatgagc tcagccatct ttacggctct ggggatcgtg atgggacagg 540
tggtcggact cagcactacg gcggctccgg ggctccgggg acttggcagg ggagctggag 600
gagctggagg aggagcgcgc tgcctgccag ggctgccgtg cccggcgccc atgggagctg 660
ttccagcatc gggccctgag gagacaggtg acaagcctcg tggttctggg cagtgccatg 720
gagctctgcg ggaatgactc ggtgtacgcc tacgcctcct ccgtgttccg gaaggcagga 780
gtgccggaag cgaagatcca gtacgcgatc atcgggactg ggagctgcga gctgctcacg 840
gcggttgtta gtgtgagtct ggagggtgcc cttcctccac cagccctgtg gggagggacc 900
cccaggtcct ctgcattaaa ccagtttaca ctccaaaaaa aaaaaaaaaa aaaaaaaaaa 960
aaaaaaaaaa aaaaaaaaaa aaaaa 985

<210> 29
<211> 914
<212> DNA
<213> Homo sapiens

<400> 29
ggcacgagct aaggctaaga aagaacactg tgaaattttc attatataga cattttaaaa 60
atactctgat ctttgctgtg ctggcttcta tagtgtttat ggggtggaca actaagacat 120
ttagaattgc aaaatgccaa tcagattgga tggaacgctg ggttgacgat gcattttgga 180
gcttcctttt ttcgcttatc cttattgtaa tcatgttttt gtggagacca tcagcaaaca 240
atcagagata tgccttcatg cccttaatag atgattctga tgatgaaatt gaggaattca 300
tggtaacttc tgaaaattta accgaaggaa taaaattaag agcctcaaaa tcagtttcca 360
atggaacagc taagcctgcc acttctgaga actttgatga agatttgaag tgggtagaag 420
aaaatattcc ctcttcattc acagatgtag ctcttccagt gttagtggat tcagatgagg 480
aaatcatgac cagatctgaa atggctgaaa aaatgttctc ttcagaaaag ataatgtgat 540
tggaacccgt ataagaaatg tagttaagcc tgaaggacta tccttcatca agactgaaag 600
tgagctttga tttgatattg cctaaaaatt tttattgtgt tatcttggaa gtctgtgtat 660
caaaatgaag aattcagatg gtaggaggtt ctatagtcct tttaaagctg actcttgagt 720
gtcagttgaa tatccattaa attggatttg gaaataacct gaggaaagta ttatgataaa 780
gatctgcaca gatgcctctt agctgatagg tggcaggcct gtgggtttgt gttctccctc 840
ttttctctgg aacatatgac aattccagat taaagaaaaa tgtttttttaa taaaaaaaaa 900
aaaaaaaaaa aaaa 914

<210> 30
<211> 1183
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (7)
<223> n equals a,t,g, or c

<400> 30
cacntgnatt catctatcag aacaatggtg tgagcatgaa gaggcacaga caggtctcca 60
aaatagatgt taggatttgg gtgctacctg acacagaagt aggtctaacc ctccaagtac 120
tggggatgat aggataatca atgaggtata tatatatttg tcattttgta taaaatattg 180
tgaaaattga aggaggacac tcagtaaaca tcctgggact atttgtaagt tatggcaaaa 240
ccagatgaga gaaaagggac agtcccctct gtatcctcgt tgtctcttag taacatcaaa 300
ttgtagttaa aaaaatttta aactatgtac aagctacaaa atagcatctc tttcatggta 360
tgtttgagtg tgtaatttta gtttcttttc tggttgtatt tgtggtagtc agatgtgttg 420
gattgattcc aactggacag agtaaggaat tccagcatcc tcttcctgct tgctcgtgtt 480
accccacaga tcaaaccctc aattctagtt ggggatgctg tctagcccca caccatgact 540

gaagccttaa gcactgttgc gcctccatgt gctttggatc agcaacccca gtggtattct 600
accagagcat tgtgggaaag cagatgtata gtcaggtccc aayagcaaat tgttgggtgt 660
gagagttcta aagtataggg gtgagggaag agaaggatat gaactcctct gaccttaagc 720
cagcattcat ttaactttta tgtctactta acaagagaac ctggagaaaa ctaccgtatt 780
caagagatta atcaaaatca gtgttttagc caggcgatga cagagaagca ccattcctca 840
ccctccattc ttgtaatgtc tgtaataaat ttcagtgcgt caggatggat gaacccaaga 900
tccagtgaat gattcagctg ttccaagcct tacattttcc atcattcatc atccattctc 960
attcagtgta acctcttgca ctattgtggt taattttatg taaaaccagt ttatgttttt 1020
ttttttttaa tatgtgccta tgtaataaag tctacacact ggctatctct gtagaggtga 1080
ggttttgttt ttagttgttc tactgattat atccttttct gagctatgaa aatgaattat 1140
taataaaaaa tttttgaaca aaaaaaaaaa aaaaaaactc gag 1183

<210> 31
<211> 1457
<212> DNA
<213> Homo sapiens

<400> 31
ggcacgagcc ggacttcaag gtgattttac aacgagatgc tgctctccat agggatgctc 60
atgctgtcag ccacacaagt ctacaccatc ttgactgtcc agctctttgc attcttaaac 120
ctactgcctg tagaagcaga cattttagca tataactttg aaaatgcatc tcagacattt 180
gatgacctcc ctgcaagatt tggttataga cttccagctg aaggtttaaa gggtttttg 240
attaactcaa aaccagagaa tgcctgtgaa cccatagtgc ctccaccagt aaaagacaat 300
tcatctggca ctttcatcgt gttaattaga agacttgatt gtaattttga tataaaggtt 360
ttaaatgcac agagagcagg atacaaggca gccatagttc acaatgttga ttctgatgac 420
ctcattagca tgggatccaa cgacattgag gtactaaaga aaattgacat tccatctgtc 480
tttattggtg aatcatcagc taattctctg aaagatgaat tcacatatga aaaaggggc 540
caccttatct tagttccaga atttagtctt cctttggaat actacctaat tcccttcctt 600
atcatagtgg gcatctgtct catcttgata gtcattttca tgatcacaaa atttgtccag 660
gatagacata gagctagaag aaacagactt cgtaaagatc aacttaagaa acttcctgta 720
cataaattca agaaaggaga tgagtatgat gtatgtgcca tttgtttgga tgagtatgaa 780
gatggagaca aactcagaat ccttccctgt tcccatgctt atcactgcaa gtgtgtagac 840
ccttggctaa ctaaaaccaa aaaaacctgt ccagtgtgca agcaaaaagt tgttccttct 900
caaggcgatt cagactctga cacagacagt agtcaagaag aaaatgaagt gacagaacat 960
acccctttac tgagaccttt agcttctgtc agtgcccagt catttggggc tttatcggaa 1020
tcccgctcac atcagaacat gacagaatct tcagactatg aggaagacga caatgaagat 1080
actgacagta gtgatgcaga aaatgaaatt aatgaacatg atgtcgtggt ccagttgcag 1140
cctaatggtg aacgggatta caacatagca aatactgttt gactttcaga agatgattgg 1200
tttatttccc tttaaaatga ttaggtatat actgtaattt gatttttgc tcccttcaaa 1260
gatttctgta gaaataactt atttttagt attctacagt ttaatcaaat tactgaaaca 1320
ggacttttga tctggtattt atctgccaag aatatacttc attcactaat aatagactgg 1380
tgctgtaact caagcatcaa ttcagctctt cttttggaat gaaagtatag ccaaaacata 1440
aaaaaaaaaa aaaaaaa 1457

<210> 32
<211> 795
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (791)
<223> n equals a,t,g, or c

<400> 32
ggcacagtgc agcatctacc taatccaggt gatctttggt gctgtggacc tgcctgccaa 60
gcttgtgggc ttccttgtca tcaactccct gggtcgccgg cctgcccaga tggctgcact 120
gctgctggca ggcatctgca tcctgctcaa tggggtgata ccccaggacc agtccattgt 180
ccgaacctct cttgctgtgc tggggaaggg ttgtctggct gcctccttca actgcatctt 240
cctgtatact gggaactgta tcccacaatg atccggcaga caggcatggg aatgggcagc 300
accatggccc gagtgggcag catcgtgagc ccactggtga gcatgactgc cgagctctac 360

ccctccatgc ctctcttcat ctacggtgct gttcctgtgg ccgccagcgc tgtcactgtc 420
ctcctgccag agaccctggg ccagccactg ccagacacgg tgcaggacct ggagagcagg 480
aaagggaaac agacgcgaca gcaacaagag caccagaagt atatggtccc actgcaggcc 540
tcagcacaag agaagaatgg actctgagga ctgagaaggg gccttacaga accctaaagg 600
gagggaaggt cctacaggtc tccggccacc cacacaagga ggaggaagag gaaatggtga 660
cccaagtgtg ggggttgtgg ttcaggaaag catcttccca ggggtccacc tccctttata 720
aaccccacca gaaccacatc attaaaaggt ttgactgcgm aaaaaaaaaa aaaaaaaaaa 780
aactcgaggg ngggc 795

<210> 33
<211> 2656
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2652)
<223> n equals a,t,g, or c

<400> 33
gatgagtgcc tagaagctgc aatgattgaa ggagaaattg agtctttaca ttcagagaat 60
tcaggaaaat caggccaaga gcattggttt actgaattac cacctgtgtt aacatttgaa 120
ttgtcaagat ttgaatttaa tcaggcattg ggaagaccag aaaaaattca caacaaatta 180
gaatttcccc aagttttata tttggacaga tacatgcaca gaaacagaga aataacaaga 240
attaagaggg aagagatcaa gagactgaaa gattacctca cggtattaca acaaaggcta 300
gaaagatatt taagctatgg ttccggtccc aaacgattcc ccttggtaga tgttcttcag 360
tatgcattgg aatttgcctc aagtaaacct gtttgcactt ctcctgttga cgatattgac 420
gctagttccc cacctagtgg ttccatacca tcacagacat taccaagcac aacagaacaa 480
cagggagccc tatcttcaga actgccaagc acatcacctt catcagttgc tgccatttca 540
tcgagatcag taatacacaa accatttact cagtcccgga tacctccaga tttgcccatg 600
catccggcac caaggcacat aacggaggaa gaactttctg tgctggaaag ttgtttacat 660
cgctggagga cagaaataga aaatgacacc agagatttgc aggaaagcat atccagaatc 720
catcgaacaa ttgaattaat gtactctgac aaatctatga tacaagttcc ttatcgatta 780
catgccgttt tagttcacga aggccaagct aatgctgggc actactgggc atatattttt 840
gatcatcgtg aaagcagatg gatgaagtac aatgatattg ctgtgacaaa atcatcatgg 900
gaagagctag tgagggactc ttttggtggt tatagaaatg ccagtgcata ctgtttaatg 960
tacataaatg ataaggcaca gttcctaata caagaggagt ttaataaaga aactgggcag 1020
ccccttgttg gtatagaaac attaccaccg gatttgagag attttgttga ggaagacaac 1080
caacgatttg aaaaagaact agaagaatgg gatgcacaac ttgcccagaa agctttgcag 1140
gaaaagcttt tagcgtctca gaaattgaga gagtcagaga cttctgtgac aacagcacaa 1200
gcagcaggag acccagaata tctagagcag ccatcaagaa gtgatttctc aaagcacttg 1260
aaagaagaaa ctattcaaat aattaccaag gcatcacatg agcatgaaga taaaagtcct 1320
gaaacagttt tgcagtcggc aattaagttg gaatatgcaa ggttggttaa gttggcccaa 1380
gaagacaccc caccagaaac cgattatcgt ttacatcatg tagtggtcta ctttatccag 1440
aaccaggcac caaagaaaat tattgagaaa acattactag aacaatttgg agatagaaat 1500
ttgagttttg atgaaaggtg tcacaacata atgaaagttg ctcaagccaa actggaaatg 1560
ataaaacctg aagaagtaaa cttggaggaa tatgaggagt ggcatcagga ttataggaaa 1620
ttcagggaaa caactatgta tctcataatt gggctagaaa attttcaaag agaaagttat 1680
atagattcct tgctgttcct catctgtgct tatcagaata acaaagaact cttgtctaaa 1740
ggcttataca gaggacatga tgaagaattg atatcacatt atagaagaga atgtttgcta 1800
aaattaaatg agcaagccgc agaactcttc gaatctggag aggatcgaga agtaaacaat 1860
ggtttgatta tcatgaatga gtttattgtc ccatttttgc cattattact ggtggatgaa 1920
atggaagaaa aggatatact agctgtagaa gatatgagaa atcgatggtg ttcctacctt 1980
ggtcaagaaa tggaaccaca cctccaagaa aagctgacag attttttgcc aaaactgctt 2040
gattgttcta tggagattaa aagtttccat gagccaccga agttaccttc atattccacg 2100
catgaactct gtgagcgatt tgcccgaatc atgttgtccc tcagtcgaac tcctgctgat 2160
ggaagataaa ctgcacactt tccctgaaca cactgtataa actcttttta gttcttaacc 2220
cttgccttcc tgtcacaggg tttgcttgtt gctgctatag tttttaactt ttttttattt 2280
taataacygc aaargacaaa atgactatac agactttagt cagactgcag acaataaagc 2340
tgaaaatcgc atggcgctca gacattttaa ccggaactga tgtataatca caaatctaat 2400
tgattttatt atggcaaaac tatgcttttg ccaccttcct gttgcagtat tactttgctt 2460

ttatcttttc tttctcaaca gctttccatt cagtctggat ccttccatga ctacagccat 2520
ttaagtgttc agcactgtgt acgatacata atatttggta gcttgtaaat gaaataaaga 2580
ataaagtttt atttatggct aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaact 2640
cgaggggggg cncaaa 2656

<210> 34
<211> 2566
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2553)
<223> n equals a,t,g, or c

<400> 34
gcaaatagca acttcagtac atcataatat aaatagaaaa aaaagatcag tgcttagatt 60
gttaatgttt tgtttttatt tgaattattt tactaacttg tttttgtttt taacctgttc 120
tcgctcagag tccctctcct ccccgacagg accctattca ggtttcccct tcttaaagtc 180
tcccccagtg aggaactctc tcaacaaggg cccactcctg gtgcagtact atagcttttc 240
atcccacctc agagtccccc gcaaaaagaa acaagtgatc agagtaccag tcagggtacc 300
tcctaaaagc ccagcgatgt cccctccatc cagtccaagg tttcactttt tcacctttc 360
tggtcctttc cccaacagct attaatggta ttatccattc aggtctttct tcaccccagg 420
ccttgtggga ccamccttaa tcatccagtg gtactgcccc ctcttaggat ataccaccam 480
cgstcacaca ggatctccac ccagaaacaa tgacatctgg ggtctttctc cagtcccctg 540
gcatggtatt tcttacaaac tttctacctc ccactggcta atagctttat tcaagtasaa 600
ttacacgcca taaaatttac tcattttatt tttttatttt tattaagtta ggttgtgttc 660
aggatttact ctttttaagt ctgcaattca ctttttttttt ggtaaattta gagttgtaca 720
gtcatcacca tcatccaatt ttagcacatt tccatcacct caaaaagatc cctcatgccc 780
atttgstgct attccacatt ataaccttcc acccctggca accactaatc tactttgtgt 840
ctgtatarat tggctttttc tgcatatttc atataaaaat ggaacatata atatttggtc 900
ttaagtattt ttgaaacata taattttgtt gtggaaatag tagttgattt tatctatgtc 960
tttatcaggc ctttctctgt attgaatttt cacattgtca ataccactca gaaacagtgg 1020
ttyatcctac tgcagcaagt tcattgaata ctgttggcac tggaatttat ccctgctgta 1080
accaaaaggt yctycggttt gatcctactc agcttacaaa gggctgtaaa rtgagggacc 1140
acatggttac mcttcgtgat caaggtgaag gsggagattt gccgtcctgt cccactgcta 1200
gaatgttgga cgatttgcac aagtacagag atgtcattgt tgtgcctttt tcaaaagata 1260
cagttagtga tgttggggtt ggcctctgtg atgaaaaggg tatagaatgt gatgttttac 1320
tggagccaaa tacaccatgg ggtcccaaaa ctggggagct caatgctttc ttgtcattga 1380
aaaactggac tctacaactg aaacaacagt cactgttttc agaagaagaa gaatatacca 1440
ctggatctga ggtcactgaa gatgaagttg gagatgaaga agaagtatcc aagaaacaaa 1500
ggaaaaagga gaagccaaag aagttcacta gacmaccaaa aaagcaggta tcttcaccct 1560
gtgcccagag gaaagaaaag gcattggaga aggtaactct gaattatctg ktgktaaagt 1620
catatggaaa aataagcatg tgagtatagc cagaaaaaaa taaaaagagt aatgaagaca 1680
catggaatgc tagcaatgta aaaatgaagt tttttataga ctgagattaa agatctctaa 1740
gatatattga caaatgagaa aaggaaggtg cagaaacgta tagtggtata gtatgctacc 1800
atttgtgtaa agtagatggg ggaaatatat aaataacttc cttgtatatg cataaaatgt 1860
ttctggaagg ctacataaga actcgataaa attggttgcc tctcaggaag ggaactgaac 1920
gtgtaaggga cagaagtgag agtcttttca ttatatgtgc cattatacct tttgaatttt 1980
aaaccaatat tatttattca aaaaattaaa aatagtcttt taaattaaaa ataaatcata 2040
ttttatgata tttaaaaata attcttattt ctccatgcct ttgaaggaag gggtaaaaaa 2100
gccaggtagg aataagagaa tagtaataac caccattggc taaaagaaaa actgtgaatt 2160
tcaaaaatgt gtgataggtt gagtctgggt taagatccac agaattacat tggacacatt 2220
gtacattcat ctttgtgtta agtagcacag gcatataagt gggttaattc taaaaaaaaa 2280
ttgtatcagc tggtcttgag cttttgacct cgtgatctgc ccgcctcagc ctcctaaagt 2340
actgggatta taggcgtgag ccacaatgcc tggccacatt tatgtatttt tttatattct 2400
gtatcagtta gcctgtttat tcacgtaaaa gttttccacc atgtcttatt atccatggtc 2460
cataggtcat ctataacaca tataataaag tacatcattg ctgaaaaaaa aaaaaaaaaa 2520
actcgagggg gggtcccgta cccaattctc ctnacatgca tcgtat 2566

<210> 35

<211> 1668
<212> DNA
<213> Homo sapiens

<400> 35
aatttcgaac acccataaaa ttgtaaagaa ttgtacagta cattttaaca tattkgcttg 60
ttacaaycta tacatttwaw gttttttaac cacttcaaag taagtttcag acaccaacac 120
atttttaaa tgatccctac catttttaa atgatcccta ccaaaatgga aggctggtat 180
cccaaggttt tgttccattt ctcaattcta gtctgtgaaa ttgargtctg atgaccactc 240
ttaagrgggc tgttcattag ggkgcgggct gggcattatg agtgtgtttt tcatgagkca 300
gtggaaggag gggcttgttg tgagcagtgc atgagaaaaa cggcttggct ttgcttcttt 360
ttccagctct gtggccttgg tcaggttacg tctcttcagt atcgtaactg taatgtggag 420
ataaagcctt cattagttag gggcacacac cgcagtattc cttaagtcat cttgatgaca 480
agtgaatgca aggcagctgg tacctttcag gtagtagttg aattcaggta gtattgttca 540
gttttttttt ttcccttcat gttctaagac cagctgagag gcaaagttgt accactgagc 600
tctagttgtt gttacctaaa aagsccttgt tttaaatttc tgtgatacct aagaatttca 660
aatctgggtt gtcatggatt ctttattctt tttttctccc ttaaaaagtt acattttaga 720
tgaaatcccc tttyttaaaa tgggcaaagc aataattcta catcatttct ccccttccct 780
tccacttgtt tagactaaga tatgttagag agggaaaggg tcgttgtttt agtaaatact 840
attgctgttg acatgttaat actattgctg ttgacatgtt tactgatggg ctgtgttcca 900
taattttgtt ttaggtcttt tgtttgaaac agtttactgt ttttatcagt tttggtccct 960
aatttttcct aacctacagt ttttctctga gtacatatgg tttcattgtt tgatctactt 1020
tctatctatc tgaatatgaa cttctaggat catgtttatt ctagtagatg atgacttaaa 1080
gcctgcagta taggagggac aacgtcaact actgcatgtg caataacaag cttgaaggga 1140
agctaaatgt ttgttacaaa tttaagacag tattttaatg ccgtttgcat ttttctaaga 1200
attttctata aagctaattc tgktatttt tgtctctaaa ttagggaact gtccaggttt 1260
attgctgccg ggagactaca ctgcaaaata gataaagtga atgaaatagt agaaaccaac 1320
aggtactctc atttctcaga ataaggggc attcctaaat tttaaaagta ggkcaactat 1380
tgkcatggaa taatgtgact ggtaaataat tcatttttc ttgaatttat ttatagacct 1440
gatagcaaga actggcagta ccaagaaact atcaagaaag gagatctgct actaaacaga 1500
gttcaaaaac tttccagagt aattaatatg taaagccatg taactaacaa aggatttgct 1560
ttagagataa ttatttggaa tttttatagc ttacttcaca atgtgcccag gtcagctgta 1620
taaaataaat actgcattgt tgttaaaaaa aaaaaaaaaa aactcgta 1668

<210> 36
<211> 983
<212> DNA
<213> Homo sapiens

<400> 36
ccgcccgcct gccggccccg gtccggaatt cccgggtcga cccacgcgtc cggggcaagt 60
gagcgagctc cttcctcacc gggctgacta gcctctcctt tccctgtccc cctccatcgc 120
tgctctgcag gaagccagcc cccagggcca gtcccggags ggctgatccg catctacagc 180
atgaggttct gcccctattc tcacaggacc cgcctcgtcc tcaaggccaa agacatcaga 240
catgaagtgg tcaacattaa cctgagaaac aagcctgaat ggtactatac aaagcaccct 300
tttggccaca ttcctgtcct ggagaccagc caatgtcaac tgatctatga atctgttatt 360
gcttgtgagt acctggatga tgcttatcca ggaaggaagc tgtttccata tgacccttat 420
gaacgagctc gccaaaagat gttattggag ctattttgta aggtcccaca tttgaccaag 480
gagtgcctgg tagcgttgag atgtgggaga gaatgcacta atctgaaggc agccctgcgt 540
caggaattca gcaacctgga agagattctt gagtatcaga acaccacctt ctttggtgga 600
acctgtatat ccatgattga ttacctcctc tggccctggt ttgagcggct ggatgtgtat 660
gggatactgg actgtgtgag ccacackcca gcctgcggct ctggatatca gccatgaagt 720
gggaccccac agtctgtgct cttctcatgg ataagagcat tttccagggc ttcttgaatc 780
tctattttca gaacaaccct aatgcctttg actttgggct gtgctgagtc tcactgtcca 840
ccccttcgct gtccagaatt ccccagcttg ttgggagtct acgtcacggc ttgtcttggg 900
aaccaatccg tctctctttc ttttctttga agttcccaat aaaatgaaaa caggaaaaaa 960
aaaaaaaaaa aaagggcggc cgc 983

<210> 37
<211> 2351
<212> DNA

<213> Homo sapiens

<400> 37
ccacgcgtcc ggcagaagca gcagcagcag aagacacagc gccggtccag gaggcggctc 60
gagctgttcg taaagtcgcc cgacagcttt ttctccgtag tatgcgagtt gacaaaacag 120
ccagagaaca gggctcccca ttacaatctt ttcgagatct tttcccttgc taaccggatc 180
tgatttgtgc gaaaacatgc cttgcacttg tacctggagg aactggagac agtggattcg 240
acctttagta gcggtcatct acctggtgtc aatagtggtt gcggttcccc tatgcgtgtg 300
ggaattacag aaactggagg ttggaataca caccaaggct tggtttattg ctggaatctt 360
tttgctgtga ctattcctat atcactgtgg gtgatattgc aacacttagt gcattataca 420
caacctgaac tacaaaaacc aataataagg attctttggg atggtaccta tttacagttt 480
tagatagttg gatagctttg aaatatcccg gaattgcaat atatgtggat acctgcagag 540
aatgctatga agcttatgta atttacaact ttatgggatt ccttaccaat tatctaacta 600
accggtatcc aaatctggta ttaatccttg aagccaaaga tcaacagaaa catttccctc 660
ctttatgttg ctgtccacca tgggctatgg gagaagtatt gctgtttagg tgcaaactaa 720
gtgtattaca gtacacagtt gtcagacctt tcaccaccat cgttgcttta atctgtgagc 780
tgcttggtat atatgacgaa gggaacttta gcttttcaaa tgcttggact tatttggtta 840
taataaacaa catgtcacag ttgtttgcca tgtattgtct cctgctcttt tataaagtac 900
taaaagaaga actgagccca atccaacctg ttggcaaatt tctttgtgta aagctggtgg 960
tttttgtttc tttttgattt ggcgtttacc ttttcctaac atataggcaa gcagtagtta 1020
ttgctttgtt ggtaaaagtt ggcgttattt ctgaaaagca tacgtgggaa tggcaaactg 1080
tagaagctgt ggccaccgga ctccaggatt ttattatctg tattgagatg ttcctcgctg 1140
ccattgctca tcattacaca ttctcatata aaccatatgt ccaagaagca gaagagggct 1200
catgctttga ttcctttctt gccatgtggg atgtctcaga tattagagat gatatttctg 1260
aacaagtaag gcatgttgga cggacagtca ggggacatcc caggaaaaaa ttgtttcccg 1320
aggatcaaga tcaaaatgaa catacaagtt tattatcatc atcatcacaa gatgcaattt 1380
ccattgcttc ttctatgcca ccttcaccca tgggtcacta ccaagggttt ggacacactg 1440
tgactcccca gactacacct accacagcta agatatctga tgaaatcctt agtgatacta 1500
taggagagaa aaaagaacct tcagataaat ccgtggattc ctgaacagta tggaaaagca 1560
aactgtgcaa ctactacatt atatcattac ctggtatccc atggattttg tgcttgggac 1620
agaccataaa tgatggaaaa tgtcaacaca aaaatagctg aaagccaggt acaactactg 1680
catttatata tgtaagtttt gtatatcaaa aataattggt ctaaatttcc tagacttaga 1740
cttgatttct taacattagg gtatcgcata ctcaaatggt agacaatgac cccaactaaa 1800
tcttcctgat gttacactgc tttatcaaga ggatggactt ttttttttt gagacagaca 1860
gagtcttgct ctgtcaccca ggctggagtg cagtggcgca atctcgggtc actgcaagct 1920
ctgcctccca agttcatgcc attctcctgc ctcagccctc ccaagtagct gggactacag 1980
gcacctgcca ccatgcccag ctaatttttt ttttttcagt agagacaggg tctcaccatg 2040
ttagccagga tggtcttgat ctgacctcgt gatccgccga cctcggcctc ccaaagtgct 2100
ggaattacag gcgtgagcca ctgcgcctgg ccaagaatgg acatttttta aaaaaacatc 2160
agtacttcct accactgctg catgagtata atgctccgga attatcagaa agcataatgc 2220
agaaatacga attagtggaa cttaatcatg tgccatataa gcttacctaa caaacagtta 2280
tatccctatt cctcaactga atgtctttca ataaataaga atttatcatt taaaaaaaaa 2340
aaaaaaaaaa a 2351

<210> 38
<211> 1534
<212> DNA
<213> Homo sapiens

<400> 38
ccacgcgtcc gcccacgcgt ccggaaatac taaaaattaa atgaaaagtt gtgatgcttg 60
aagtgctgat tagtattcgg actaaagtat atgaatgaat aacaattttt tctctgcaga 120
gactgcagca tgaaatctca tgctacattg actggtggca gtggttttta tttcatagaa 180
ctttcttttc tgttgttgag atctgtgctg ttggtgctgg ttctgctttg gcagttccca 240
aagtccctta caggacaaga atgatgagtg gggatataaa tctcaattcc agcagctgct 300
cactcacagg tgtctcggtg gaagaattgg gtcttgttga gcctgtagct tctctctata 360
tactgctggg agatgctgcc tgtgagtgcc ttgcttgata tccaggtgct agggctaagg 420
acctctttgt ggaatagcca tctttgcttg aggtctgtgc aattgtgtat gcctgcagtg 480
cagtgcctgg taaggctttc aaactgtggg caagaatgta acaatgcctg tcactcgtga 540
agagacacag tcggtgaggt gagtatggat tatgccaagg aaagttttct gggtcagaga 600
ctttatcctg ctgcaggaat taactccatt gatcaaaaac agccttaatt gggatggggc 660

tcgggggcaa atttcatatg tgattggcag gagtctaaac tgtatagctt ttctggaggg 720
cattttggca gtggggatta aagtgtcaaa tgtgcatact ctgtgactgg acattttcac 780
ttcacagaat ttatcctaag gaaagcattg tacaagtata cacaaaaggg tgttcctccg 840
caccataatg tttagtgttg ccatcacctg gggctttatt aaaaaaggaa aagttacata 900
aattccagta aaaccataca gtggaatatt ataaagctgc tgaagaagat gaagtcaact 960
tctatgtact attatggaat gatggtaaag aaattatgta caaaagtcac agatcagcat 1020
gaatagtgtg atcctatttt caatatatat gtgtgtattg agtgcatatt atgtaaaggt 1080
ttatatgcat taattttggg aggaagaata tcaaatgcta atagcgatca tcaaatgcta 1140
atagtgatta tgtaaagacc ctcattttct acttcctact tctctgtatt gtttgaactg 1200
tttataaagg taaaaccata gtaatttggg ctgggtgcgg tagctcatgc ctgtaatccc 1260
agcactttgg gaggccaagt ggggtggata tcttgaggtc agttgtttaa gatgagcctg 1320
accaacatgg tgaaaccctg tctctactaa aaatacaaaa attggttggg cttgatggtg 1380
tgcacctgtg gtcctaacta cttgggaggc tgaggtggga gaattgcttg aacccaggag 1440
gtggaggtcg cagtgagctg agattgcacc actgcactcc agcctggatg atagagcaag 1500
attctctctc aaaaaaaata aaaaaaaaaa aaaa 1534

<210> 39
<211> 1182
<212> DNA
<213> Homo sapiens

<400> 39
agattagagt gataattctt gttctttgtg tattcattta tacagccctg ctccatggac 60
tactcatgtt ataataaagg gatagagaag ggcatgatga cgatgtgcgt tcccagtgtg 120
ctagctgtgg ctctacccct ttttctctca cttaagaaaa cttcccagaa acccgagaag 180
tgagagcatt ttcccccagg gaaaaccttg aattgtgtac atgtaaatcc atgggaatct 240
tcagcacttt attattagca tcagattctt tgttgaactt aatattattc ttctttattt 300
tcgctttctc agtgaagctt tcttcctcat cgtttccaag ttgttgtgtt tcggtaayck 360
gattatctgt cattycagag tccckgtcct cccackgagc cacatgcgca cacacatctc 420
tgtcaggcac ccctgtcatg taaggcacgt tgggtctgcc agagcggcac cccttgttcc 480
aactttcagg tttaatgctt gagaacattt gaaggctgtt gtctggaaaa gataagtgtt 540
tttatatttc tttgaatttt aggagttgtc taccacaaca aataaactag atcacacttt 600
ttaagttcaa tacttattat cctcattctg tggaaaaaat atattttcta ttaatcatgt 660
acataatagt actaattatg ggccactttg gctgaacaca gttttatgct taggcttaca 720
taattaaggt tgtaatgtta tttctggatc tttgaggcat tagtagagat cactgatgaa 780
gtaaactgac aaacataact ccttttcttt ggaaaagatg gatgctgtct gctaaactaa 840
tcaagttata gagccttagg ccgggtgtgt cggctcatgc ctgtggtccc ggcactttgg 900
gaggccaagg tgggcggatc atgaggtcag gagtttgaga tcatcctggc caacatggtg 960
aaaccccatc tctactaaac acacacacac acacacacac acacacacac acacacacac 1020
gccgggcatg gtggtgggca tctgtggtcc cggctactcg ggaggctgag acaggagtgt 1080
cacttcaacc caagaggcag aggttgcggt gagccaagat catgccattg cactccagcc 1140
tggaagcctg ggcaatagag caasactcca tctcaaaaaa aa 1182

<210> 40
<211> 1841
<212> DNA
<213> Homo sapiens

<400> 40
cgacccacgc gtccgcacct gtcccctctg tgagctctgt actgttctcc gtccctgcaa 60
atagacatga tgtcaccatc tggaatcatt gtgtacgtct ctgctactcc tcacatcctg 120
ctttgtattt taatcacttt catgcttgcc atcccttcta ttcataatgg cagagtttgt 180
gttttattca ttttttagca tttggtagca tttagcacta atctgtccaa ataatgaatg 240
ctcaataaac atttgtctaa ttaaactaaa acaggaggtc aggtcatttc acctttttcc 300
ccatcacgga ctgcccttaa gtctttccct gaacagaaat tagcaaattg aagtaaggaa 360
ccgaggtgtt agtagcacca cggactcttc cacttttca ccttggcaat gggaaacatc 420
ctgggggcag agatggcaga gggagcacat gggaaccggg caaatgtgac taagagacag 480
cgagtggtga caaacctcca cagggtcaca gatgttggac atgataaatt ttgcttcatg 540
aaaaattttg cttcatgaaa atgcattatg cattactttt acatgaatag ctaaattgaa 600
cggtagaata cattgtccca cttggttaaa tgtgataaaa ggagattagt ggacttgaat 660
ttgtaatcat ggatgcacac cacaagggaa aagcacttgt tccttctgcc tcgtcactag 720

tatcagtttg tggttgttac ttccaataga aatgcttcga aagatgaccc aagggctcca 780
acaatgacct tctgaactcc gttttactga ctgtttaaaa taatcctgca gcttcagatg 840
tattgacttg gatagaagcc aacataaatc agacagtgtc cctgaacaaa actgaatact 900
tcacactcag tgcctggtag cctgtgtgtt ggagggattg gcggcagctt ctctgctcct 960
ggtttgtgct gttttcatgc agagatagca acagtaacac gactaagtga ccatggctag 1020
ggaaacagcc tcacattggc aagtgtgaaa ggagccaaaa tatggccagg catggtggct 1080
cacgcctgta atcccagcac tttgggagga tgaggtgggt ggatcatttg aggtcaggag 1140
ttcgagacca gcctggccaa catggtgaaa ccccatctct actaaaactg caaaaattgg 1200
ctgggcgtgg tggtgggtgc ctgtagtctc agctactcag gaggctgaga caggagaatc 1260
acttgaaccc gggagatgga ggttgcagtg agccaagatt gcaccactgt actccagcct 1320
gggtaacaga gtaagactct gtctcaaaaa aaaaaaaaaa aaaaaaaggg ggagccaaac 1380
tgtgttctat agatgtgcac ctgagtgtag gaagaaattt aatatttagg gagaaaaatg 1440
ttagatatat atttttacat tccttgtgaa cactggcatt aatggatagg gaaccttggt 1500
tttcggggct ctctgggttt tggcattgaa aatctcttgg ctgggtgcga tgctcacgcc 1560
tgtaatccca gcactttggg aggccgaggt gggcagatca tgagttcagg agttcaagac 1620
cagcctgacc aacatggtga aaccccatct ctactaaaaa taaaaaaaaa attagccagg 1680
catggtggcg ggcgcctgta atcccagcta ctcaggaggc tgaggcagga gaatcacttg 1740
aacccgggag gcggaggttg cagtgagctg agattgcagc attgcatccc agcctgggtg 1800
acagagcgag actccatctc aaaaaaaaaa aaaaaaaaaa a 1841

<210> 41
<211> 1197
<212> DNA
<213> Homo sapiens

<400> 41
cccacgcgtc cgattgggaa aaggctgtcg ttaatcactt ttagcagcag aaatttttta 60
ttttgtgtga tgtcactgtt ccatgttgaa gagtcatgga gatgtacaaa atgtattgac 120
cttatttgtt actgtgctta gtgatgtgtc atatttgcag caaatacaaa aaaagttaag 180
aatgcatgtc cattgttttg ctatacatgt tttatttcat ttctgctcca caatttcagc 240
agatgctctt tcattctgta tattttgcta tggaccacag accctcattg acatgtattg 300
gaactcctaa gaccagtgca gtgctccaag tatctatgaa tcaaatggca gtgttcacat 360
gcttttctcc cataacttat aaagcagaag gtagttttct ttcccatcac aatagccatt 420
cttttcctta tttttcatag ttatttttctt attaagttat ctgtaaaaat aatgcatctc 480
tgtcatctgc tagcaggcca ttgttcgagg ttaaaataca aattaagaag aagcaagcaa 540
ataaatcaga tctggaaacg aagttagaga tttttgcaca aacataatac ttacaacagt 600
ttcataaaag ccaatttatt atggctactc ttaacaattc ctttaaagtt aaaaactact 660
ataggcgatt tgtctattat tcactctttg tttttataat tttgttaggt ttcttttatt 720
caagttactt tatgtaaatt acttggagtt ttatttactg aaaatcagat ttcatcattt 780
ctcccccagt tttctaactg gctttgattt ttgtttctta gcttgattgc ttgctagttt 840
ttaaatgagg taaaatatag attcggtgag atgcacagat cttgagtgtg cagttcaatt 900
gattttgata aatacaccca tgtaactgcc agctgaatca agataaagac cattctcatt 960
actccagacc ttcctgtgtt tcagtagctt tgttcacatg ttcggcagca tgtgagacga 1020
agttacctaa gccgtaggca attttatgtg attctgcata gtagtcaata tggtgataat 1080
gttactttca tcagaaggct caaagtaatg gacctgaaaa gcaggaaaaa gaaggggtta 1140
tccagaactt caagagaact ctctcaaaga aagaaaagaa ggaaaaaaaa aaaaaaa 1197

<210> 42
<211> 602
<212> DNA
<213> Homo sapiens

<400> 42
aattcggcac agkttgtgtt tctmatgttc caggtccggc caggctggca gctcctgctg 60
gtcatgtttt cctcatgtgc tgtttccaac cagctcttgg tctggtaccc agcaactgcc 120
ttagcagaca acaaacctgt agcacctgac cgacgaatca gtgggcatgt gggcatcatc 180
ttcagcatgt catacctgga aagcaaggga ttgctggcta cagyttcaga agaccgaagc 240
gttcgtatct ggaaggtggg cgacctgcga gtgcctgggg gtcgggtgca gaatattggg 300
cactgctttg ggcacagcgc ccgtgtgtgg caggtcaagc ttctagagaa ttaccttatc 360
agtgcaggag aggattgtgt ctgcttggtg tggagccatg aaggtgagat cctccaggcc 420
tttcggggac accaggatgt gtacccggtt gtagtaggag ctgaaatcca tgctgagctg 480

taccaggaac ttgcatatct agagacagag actgagtcac tggcccatct ctttgctctt 540
gtccccaggc cagaataaag aatagagtgt aaaaaaaaaa aaaaaaaaaa aaaaaactcg 600
ag 602

<210> 43
<211> 2492
<212> DNA
<213> Homo sapiens

<400> 43
ccacgcgtcc ggaggaagga tgatgatgaa ggaccgtaca caccattcga caccccctcg 60
ggtaaactgg aaacagtgaa atgggcgttc acctggccgc tgagtttcgt cttatacttc 120
actgtaccca actgcaacaa gccgcgctgg gagaaatggt tcatggtgac gtttgcttcc 180
tccacgctgt ggatcgcagc cttctcctac atgatggtgt ggatggtcac aatcattggt 240
tacaccctgg ggattcctga cgtcatcatg ggggatcacc ttcctggctg ctgggaccag 300
cgtgcctgac tgcatggcca gcctcattgt ggccagacaa gggatggggg acatggctgt 360
gtccaactcc attgggagca acgtgtttga catcctgatt ggcctcggtc tcccctgggc 420
tctgcagacc ctggctgtgg attacggatc ctacatccgg ctgaatagca gggggctgat 480
ctactccgta ggcttgctcc tggcctctgt ttttgtcacg gtgttcggcg tccacctgaa 540
caagtggcag ctggacaaga agctgggctg tgggtgcctc ctcctgtatg gtgtgttcct 600
gtgcttctcc atcatgactg agttcaacgt gttcaccttt gtgaacctgc ccatgtgcgg 660
ggaccactga gccgccgggt gcccacagaa gctcagctcc ttctttttctg tgcaatacga 720
gacccggccg caccccgagt cacacaggcc cctggggcca cggcgttcgt ctctcctgtg 780
ctgtcctcag gcctccgctc ctgttttggt ggcccaggct ctcccctgcc ccatcctcgc 840
tcccccacct ccttgggtca tgcccaccca ccctttcctg cctcctccgt gtgaagacat 900
ccaacatcca cgtgactttt ccagctccat ttttgaacag tgactgagat tctagaaaaa 960
ctggctgcta actggcctga gccaggcaac actgattcca atccctcctc ctttttaag 1020
ttatttgatg gaagactcac ctaatttgtg acctgagact gttgaagaaa tagagaggag 1080
ggggcccgtt gattacagag agcatttggg attttgtttg gtttggagat gatgcctagg 1140
ttactgggtt tgggggatt gttttctttt gggggccttc ccctttact cctttttcttc 1200
cagagatcaa gagcttctct tgcatcttct tccactgggc tctggattaa tcaattaccc 1260
aaaggctgca cctgccgtgt tgtctgggct tgcatcccag atgtgttgga gtatgcatgg 1320
atgtagtgct ttttagagga gccactgggc aaggccacca agaacaaatg catgacattt 1380
tatagccaag gacgcctcac taaagtctta tgggcgtccc ctggggttgg gggggcacaa 1440
ggttttggag gaagaagaca acttccctca ttccatcatc accatctctt tctcactagg 1500
ttctttctag ttttcaaagc aataagtcta gcctgccttg gacaaggggg cccccagtta 1560
aacaaactac ccatccatga ggtgccaggc agtcaaaaaa cagaagcttc cccgattgtg 1620
agtccatgag atgtgctctt gttgtaaggc atttggggtg acagggagtg acccagaggc 1680
caccactgct tttcatgcag gagttacaga cactggtttt cttggaaaat ggagagaagc 1740
gcactttgca cagacgtcgt caattaagtc ccaatttgcc acttggtatt gagtacactg 1800
gaccctgacc actggctttt gggcaaacgt cttcctcacg gggcgcttcc gccaagccgg 1860
cccagctgca ccctctcctt cctggaggga tggccaggga aggagaaaac agagaactga 1920
cacttttgaa accacagaat gtgtaacatg cagatcgctc aagggcataa gttattgtga 1980
acgtttttgc caatcactgc tcaacagccc tgctagattt tgtatgatgc tgaattatta 2040
tgcagactaa ttccacccag ttgagacaca ccatgcttgt tcacttgtat ttattgaaac 2100
tgtggattct tgcccgtgct gtcccttgta tttactttaa gcactgatca cttatcattc 2160
attcggtatg gttttccctg tcccttgtac acattctggt atgaatttgt aaaaataccc 2220
tactacaaat tggttgaatg tttctgtctg tggtgcgaac cagcattaac ggatggggca 2280
cgtgcccaac tgaggaacag gagaagaaat ccccaatttg ggctctcaga gctaagacac 2340
acttattgat tctgttgcac attttgcact ggtttatggc gattgttttc ttggacggat 2400
agtgtaaaat aaacttctct gttctctaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2460
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa 2492

<210> 44
<211> 2377
<212> DNA
<213> Homo sapiens

<400> 44
aggggcacga gcctaggtgt tgtcgtccct gctagtactc cgggctgtgg gggtcggtgc 60
ggatattcag tcatgaaatc agggtaggga cttctcccgc agcgacgcgg ctggcaagac 120

```
tgtttgtgtt gcgggggccg gacttcaagg tgattttaca acgagatgct gctctccata      180
gggatgctca tgctgtcagc cacacaagtc tacaccatct tgactgtcca gctctttgca      240
ttcttaaacc tactgcctgt agaagcagac attttagcat ataactttga aaatgcatct      300
cagacatttg atgacctccc tgcaagattt ggttatagac ttccagctga aggtttaaag      360
ggtttttga ttaactcaaa accagagaat gcctgtgaac ccatagtgcc tccaccagta      420
aaagacaatt catctgggca ctttcatcgt gttaattaga agacttgatt gtaattttga      480
tataaaggtt ttaaatgcac agagagcagg atacaaggca gccatagttc acaatgttga      540
ttctgatgac ctcattagca tgggatccaa cgacattgag gtactaaaga aaattgacat      600
tccatctgtc tttattggtg aatcatcagc taattctctg aaagatgaat tcacatatga      660
aaaaggggc caccttatct tagttccaga atttagtctt cctttggaat actacctaat      720
tcccttcctt atcatagtgg gcatctgtct catcttgata gtcattttca tgatcacaaa      780
atttgtccag gatagacata gagctagaag aaacagactt cgtaaagatc aacttaagaa      840
acttcctgta cataaattca agaaaggaga tgagtatgat gtatgtgcca tttgtttgga      900
tgagtatgaa gatggagaca aactcagaat ccttccctgt tcccatgctt atcaytgcaa      960
gtgtgtagac ccttggctaa ctaaaaccaa aaaaacctgt ccagtgtgca agcaaaaagt     1020
tgttccttct caaggcgatt cagactctga cacagacagt agtcaagaag aaaatgaagt     1080
gacagaacat acccctttac tgagaccttt agcttctgtc agtgcccagt catttggggc     1140
tttatcggaa tcccgctcac atcagaacat gacagaatct tcagactatg aggaagacga     1200
caatgaagat actgacagta gtgatgcaga aaatgaaatt aatgaacatg atgtcgtggt     1260
ccagttgcag cctaatggtg aacgggatta caacatagca aatactgttt gactttcaga     1320
agatgattgg tttatttccc tttaaaatga ttaggtatat actgtaattt gatttttgc      1380
tcccttcaaa gatttctgta gaaataactt atttttagt attctacagt ttaatcaaat      1440
tactgaaaca ggacttttga tctggtattt atctgccaag aatatacttc attcactaat     1500
aatagactgg tgctgtaact caagcatcaa ttcagctctt cttttggaat gaaagtatag     1560
ccaaaacata aaaaaaaaaa aaatcctcag tatagcttgc aattaagacc tagatcacag     1620
tatttaagtg ttttgcgttt tatacatgag gtcagtgcta cagccaccta gcatgaacta     1680
acccagcttc cacctccata aagttaccta gagttgttga gttggaatat gttctggcat     1740
ttacctgacc tgccaatcat tagggagagg caacaaggta attcagcctt tcctcctatc     1800
agcacaaaga aactcaaagc tgtttttttcc ctttctgttc caaagcagtc ttatcctgac     1860
aggagcggtc tatactagtg cagatttcaa cacttttttt taacgtttta attactatag     1920
tgttatgtag agatttgatt gagcagctaa tgtttctgaa ctttacttac taattttcag     1980
tgtccttaag ggttctgtag tgttatcaaa gcaaaaagaa aatgctgcat aaaaatacca     2040
aacttcagca actgttaata ctcagatcat atacctctta ataaatagca tcttatgcta     2100
attagccctg ctaaactatg tacagaggaa actgttcaag tattggattt gaaagtaagt     2160
gacttatgtt taacagaact aatgatgtat tgaaacactg tattatgaaa agctaaatta     2220
tacatcattg taactatgta gaaagtgtag actaatgtat aatcaaaatg ctaaggattt     2280
ttatatggcc ttgtatgagg ggagtttgaa tgttaataaa catgttttcc actttaagat     2340
ccagtaaatg tctgttctac tgtagtatta cttaaaa                              2377
```

<210> 45
<211> 74
<212> PRT
<213> Homo sapiens

<400> 45

```
Met Leu His Leu Ala Ala Met Trp Trp Ala Cys Val Thr Thr Leu Val
  1               5                  10                  15

Phe Thr Leu Val Ser Lys Leu Phe Ile Pro Leu Lys Ser Ser Met Asp
             20                  25                  30

Gly Glu Met Ser Leu Asp Pro His Ser Cys Val Leu Val Cys Ile Cys
         35                  40                  45

Phe Pro Leu Arg Phe Val Phe Val Ser Cys Phe Glu Leu Tyr Leu Val
     50                  55                  60

Gln Ser Ile Val Lys Leu Ser Gln Gln Leu
 65                  70
```

<210> 46

<211> 77
<212> PRT
<213> Homo sapiens

<400> 46
Met Asp Ala Phe Ala Gly Ser Pro Phe Ser Leu Met Val Pro Lys Cys
1 5 10 15

Val Leu Ile Leu Phe Cys Leu Val Tyr Ser Leu Gln Cys Ile Gln Pro
20 25 30

Tyr Ser Ser Leu Leu Asn Ser Ala Ser Leu Pro Tyr His His Gly Leu
35 40 45

Lys Leu Ala Asn Leu Leu Leu Ile Val Phe Tyr Pro His Ile His Ser
50 55 60

Ile Pro Phe Ser Ser Ser His Pro Ser Lys Leu His Ile
65 70 75

<210> 47
<211> 46
<212> PRT
<213> Homo sapiens

<400> 47
Met Asp Leu Leu Gln Val Cys Phe Phe Leu Phe Phe Ser His Leu Trp
1 5 10 15

Ser Trp Thr Glu Gly Lys Leu Pro Cys Asn Phe Pro Gly Pro Val Gly
20 25 30

Arg Val Phe Leu Ser Pro Phe Gln Met Leu Gly Phe Lys Gln
35 40 45

<210> 48
<211> 101
<212> PRT
<213> Homo sapiens

<400> 48
Met Ala Phe Trp Phe Thr Gly Leu Pro Leu Leu Ser Leu Ile Leu Leu
1 5 10 15

Cys Ile Gly Arg Val Phe Leu Gly Val Gly Glu Ser Phe Ala Ser Thr
20 25 30

Gly Ser Thr Leu Trp Gly Ile Gly Leu Val Gly Pro Leu His Thr Ala
35 40 45

Arg Val Ile Ser Trp Asn Gly Val Ala Thr Tyr Gly Ala Met Ala Ala
50 55 60

Gly Ala Pro Leu Gly Val Tyr Leu Asn Gln His Trp Gly Leu Ala Gly
65 70 75 80

Val Ala Ala Leu Ile Val Leu Ala Val Ala Val Ser Leu Trp Leu Ala
85 90 95

Ser Ala Asn Pro Thr
100

<210> 49
<211> 381
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (141)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (165)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (194)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (344)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (361)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 49
Met Phe Gln Val Arg Pro Gly Trp Gln Leu Leu Leu Val Met Phe Ser
1 5 10 15

Ser Cys Ala Val Ser Asn Gln Leu Leu Val Trp Tyr Pro Ala Thr Ala
20 25 30

Leu Ala Asp Asn Lys Pro Val Ala Pro Asp Arg Arg Ile Ser Gly His
35 40 45

Val Gly Ile Ile Phe Ser Met Ser Tyr Leu Glu Ser Lys Gly Leu Leu
50 55 60

Ala Thr Xaa Ser Glu Asp Arg Ser Val Arg Ile Trp Lys Val Gly Asp
65 70 75 80

Leu Arg Val Pro Gly Gly Arg Val Gln Asn Ile Gly His Cys Phe Gly
85 90 95

His Ser Ala Arg Val Trp Gln Val Lys Leu Leu Glu Asn Tyr Leu Ile

```
          100                 105                 110

Ser Ala Gly Glu Asp Cys Val Cys Leu Val Trp Ser His Glu Gly Glu
        115                 120                 125

Ile Leu Gln Ala Phe Arg Gly His Gln Gly Xaa Gly Xaa Arg Ala Ile
    130                 135                 140

Ala Ala His Glu Arg Gln Ala Trp Val Ile Thr Gly Gly Asp Asp Ser
145                 150                 155                 160

Arg His Arg Leu Xaa His Leu Val Gly Arg Gly Tyr Arg Gly Leu Gly
                165                 170                 175

Val Ser Ala Leu Cys Phe Lys Ser Arg Ser Arg Pro Gly Thr Leu Lys
            180                 185                 190

Ala Xaa Thr Leu Ala Gly Ser Trp Arg Leu Leu Ala Val Thr Asp Thr
        195                 200                 205

Gly Ala Leu Tyr Leu Tyr Asp Val Glu Val Lys Cys Trp Glu Gln Leu
    210                 215                 220

Leu Glu Asp Lys His Phe Gln Ser Tyr Cys Leu Leu Glu Ala Ala Pro
225                 230                 235                 240

Gly Pro Glu Gly Phe Gly Leu Cys Ala Met Ala Asn Gly Glu Gly Arg
                245                 250                 255

Val Lys Val Val Pro Ile Asn Thr Pro Thr Ala Ala Val Asp Gln Thr
            260                 265                 270

Leu Phe Pro Gly Lys Val His Ser Leu Ser Trp Ala Leu Arg Gly Tyr
        275                 280                 285

Glu Glu Leu Leu Leu Leu Ala Ser Gly Pro Gly Gly Val Val Ala Cys
    290                 295                 300

Leu Glu Ile Ser Ala Ala Pro Ser Gly Lys Ala Ile Phe Val Lys Glu
305                 310                 315                 320

Arg Cys Arg Tyr Leu Leu Pro Pro Ser Lys Gln Arg Trp His Thr Cys
                325                 330                 335

Ser Ala Phe Leu Pro Pro Gly Xaa Phe Leu Val Cys Gly Asp Arg Arg
            340                 345                 350

Gly Ser Val Leu Leu Phe Pro Ser Xaa Pro Gly Leu Leu Lys Asp Pro
        355                 360                 365

Gly Val Gly Gly Lys Ala Arg Ala Gly Ala Gly Ala Leu
    370                 375                 380
```

<210> 50
<211> 45
<212> PRT
<213> Homo sapiens

<400> 50

```
Met Gln Lys Lys Lys Leu Val Cys Tyr Leu Met Leu Arg Gln Tyr Phe
  1               5                  10                  15
```

```
Phe Leu Val Val Val Ser Leu Pro Trp Pro Cys Val Leu Phe Gln Met
            20                  25                  30

His Tyr Pro Arg Thr Val Thr Pro Thr Leu Thr Glu Tyr
        35                  40                  45

<210> 51
<211> 168
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 51
Met Val Thr Phe Ala Ser Ser Thr Leu Trp Ile Ala Ala Phe Ser Tyr
  1               5                  10                  15

Met Met Val Trp Met Val Thr Ile Ile Gly Tyr Thr Leu Gly Ile Pro
            20                  25                  30

Asp Val Ile Met Gly Ile Thr Phe Leu Ala Ala Gly Thr Ser Val Pro
        35                  40                  45

Asp Cys Met Ala Ser Leu Ile Val Ala Arg Gln Xaa Met Gly Asp Xaa
    50                  55                  60

Ala Val Ser Asn Ser Ile Gly Ser Asn Val Phe Asp Ile Leu Ile Gly
65                  70                  75                  80

Leu Gly Leu Pro Trp Ala Leu Gln Thr Leu Ala Val Asp Tyr Gly Ser
                85                  90                  95

Tyr Ile Arg Leu Asn Ser Arg Gly Leu Ile Tyr Ser Val Gly Leu Leu
            100                 105                 110

Leu Ala Ser Val Phe Val Thr Val Phe Gly Val His Leu Asn Lys Trp
        115                 120                 125

Gln Leu Asp Xaa Lys Leu Gly Cys Gly Cys Leu Leu Leu Tyr Gly Val
    130                 135                 140

Phe Leu Cys Phe Ser Ile Met Thr Glu Phe Asn Val Phe Thr Phe Val
145                 150                 155                 160

Asn Leu Pro Met Cys Gly Asp His
                165
```

<210> 52
<211> 49
<212> PRT
<213> Homo sapiens

<400> 52
Met Thr Ser Val Pro Leu Ala Thr Phe Ser Val Leu Thr Ile Ala Leu
1 5 10 15

Arg Ala Gln Val Leu Lys Leu Val Val Leu Ser Phe Val Ser Ala Phe
20 25 30

Ser Pro Val His Tyr Pro Pro Pro Leu Leu Leu Lys Gln Ser Arg Leu
35 40 45

Asn

<210> 53
<211> 40
<212> PRT
<213> Homo sapiens

<400> 53
Met Leu Cys Asp Leu Ile Leu Leu Phe Asn Ile Lys Met Ala Ile Tyr
1 5 10 15

His Leu Ile Ile Leu Gln Phe Phe Cys Ser Val Cys Ser Glu Pro Asp
20 25 30

Thr Ala Leu Ser Ile Ser Pro Leu
35 40

<210> 54
<211> 94
<212> PRT
<213> Homo sapiens

<400> 54
Met Leu Leu Ser Phe Tyr Cys Leu Pro Met Val Ser Ile His Ile Phe
1 5 10 15

Phe Pro Cys Ala His Cys Val Tyr Leu Leu His Ile Ser Cys Ser Leu
20 25 30

Gly Glu Glu Ser Phe Asn Arg Asp Thr Cys Lys Lys Asp Phe Cys Phe
35 40 45

Ser Ile Gln Asn Val Asn Ser Thr Phe Leu Leu Ser Leu Ala Val Phe
50 55 60

Arg Phe Ser Glu Arg Phe Ser Asp Ser Asn Phe Leu Phe Thr Thr Pro
65 70 75 80

Pro Ile Cys Ser Glu Lys Asn Gly Leu Leu Tyr His Trp Ile
85 90

<210> 55
<211> 484
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (322)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (345)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (374)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 55
Met Val Ala Thr Val Cys Gly Leu Leu Val Phe Leu Ser Leu Gly Leu
1 5 10 15

Val Pro Pro Val Arg Cys Leu Phe Ala Leu Ser Val Pro Thr Leu Gly
20 25 30

Met Glu Gln Gly Arg Arg Leu Leu Leu Ser Tyr Ser Thr Ala Thr Leu
35 40 45

Ala Ile Ala Val Val Pro Asn Val Leu Ala Asn Val Gly Ala Ala Gly
50 55 60

Gln Val Leu Arg Cys Val Thr Glu Gly Ser Leu Glu Ser Leu Leu Asn
65 70 75 80

Thr Thr His Gln Leu His Ala Ala Ser Arg Ala Leu Gly Pro Thr Gly
85 90 95

Gln Ala Gly Ser Arg Gly Leu Thr Phe Glu Ala Gln Asp Asn Gly Ser
100 105 110

Ala Phe Tyr Leu His Met Leu Thr Val Thr Gln Gln Val Leu Glu Asp
115 120 125

Phe Ser Gly Leu Glu Ser Leu Ala Arg Ala Ala Ala Leu Gly Thr Gln
130 135 140

Arg Val Val Thr Gly Leu Phe Met Leu Gly Leu Leu Val Glu Ser Ala
145 150 155 160

Trp Tyr Leu His Cys Tyr Leu Thr Asp Leu Arg Phe Asp Asn Ile Tyr
165 170 175

Ala Thr Gln Gln Leu Thr Gln Arg Leu Ala Gln Ala Gln Ala Thr His
180 185 190

Leu Leu Ala Pro Pro Pro Thr Trp Leu Leu Gln Ala Ala Gln Leu Arg
195 200 205

Leu Ser Gln Glu Glu Leu Leu Ser Cys Leu Leu Arg Leu Gly Leu Leu
210 215 220

Ala Leu Leu Leu Val Ala Thr Ala Val Ala Val Ala Thr Asp His Val
225 230 235 240

```
Ala Phe Leu Leu Ala Gln Ala Thr Val Asp Trp Ala Gln Lys Leu Pro
                245                 250                 255

Thr Val Pro Ile Thr Leu Thr Val Lys Tyr Asp Val Ala Tyr Thr Val
            260                 265                 270

Leu Gly Phe Ile Pro Phe Leu Phe Asn Gln Leu Ala Pro Glu Ser Pro
        275                 280                 285

Phe Leu Ser Val His Ser Ser Tyr Gln Trp Glu Leu Arg Leu Thr Ser
    290                 295                 300

Ala Arg Cys Pro Leu Leu Pro Ala Arg Arg Pro Arg Ala Ala Ala Pro
305                 310                 315                 320

Leu Xaa Ala Gly Gly Leu Gln Leu Leu Ala Gly Ser Thr Val Leu Leu
                325                 330                 335

Glu Gly Tyr Ala Arg Arg Leu Arg Xaa Ala Ile Ala Ala Ser Phe Phe
            340                 345                 350

Thr Ala Gln Glu Ala Arg Arg Ile Arg His Leu His Ala Arg Leu Gln
        355                 360                 365

Arg Arg His Asp Arg Xaa Gln Gly Gln Gln Leu Pro Leu Gly Asp Pro
    370                 375                 380

Ser Cys Val Pro Thr Pro Arg Pro Ala Cys Lys Pro Pro Ala Trp Ile
385                 390                 395                 400

Ala Tyr Arg Leu Asp Ala Leu Arg Thr Glu Ser Ser Glu Gly Glu Gly
                405                 410                 415

Lys Glu Leu Trp Ser Cys Arg Asp Leu Ser Cys His Leu Gly Pro Val
            420                 425                 430

Pro Pro Pro Cys Val Thr Leu Gly Lys Ser Leu His Leu Ser Glu Pro
        435                 440                 445

Arg Phe Leu His Leu His Asn Asp Ser Ile Phe Thr Ile Asp Val Thr
    450                 455                 460

Tyr Phe Pro Arg Arg Asp Val Val Arg Met Glu Gly Asn Thr Gly His
465                 470                 475                 480

Asp Arg Pro Gly
```

<210> 56
<211> 114
<212> PRT
<213> Homo sapiens

<400> 56

```
Met Pro Ile His Lys Thr Lys Ile Ser Cys Val Phe Leu Leu Leu Ser
  1               5                  10                  15

Leu Lys Trp His Trp Met Thr Asn Gly Lys Leu Asp Ala Ala Leu Asn
             20                  25                  30

Val Pro Leu Gly Phe Arg Gly Phe Gln Ser Gln Trp Thr Gly Gly Gly
```

```
         35                  40                  45

Leu Cys Gln Cys Leu Ser Gly Val Cys Leu Cys His Cys Gly Ala Ala
     50                  55                  60

Trp Ala Thr Asp Leu Gly Arg Thr Leu Gly Asp Gly Ala Pro Val Trp
 65                  70                  75                  80

Trp Val Cys Val Gly Ser Ala Val Pro Val His Val Arg Lys Ala Leu
                 85                  90                  95

Leu Leu Tyr Thr Glu Ser Cys Ser Leu Ser Thr Thr Asp Arg Ser Pro
            100                 105                 110

Leu Pro
```

<210> 57
<211> 49
<212> PRT
<213> Homo sapiens

<400> 57

```
Met Ser Arg Ala Pro Cys Ala Ser Ser Ile Leu Val Leu Thr Leu Ile
  1               5                  10                  15

Val Thr Leu Leu Val Leu Leu Cys Ser Val Lys Ile Cys Asn Trp Leu
            20                  25                  30

Arg Ile Thr Val Gly Val His Ser Tyr Ser Thr Lys Ser Pro Gln Val
         35                  40                  45

Phe
```

<210> 58
<211> 171
<212> PRT
<213> Homo sapiens

<400> 58

```
Met Lys Lys Cys Leu Leu Pro Val Leu Ile Thr Cys Met Gln Thr Ala
  1               5                  10                  15

Ile Cys Lys Asp Arg Met Met Met Ile Met Ile Leu Leu Val Asn Tyr
            20                  25                  30

Arg Pro Asp Glu Phe Ile Glu Cys Glu Asp Pro Val Asp His Val Gly
         35                  40                  45

Asn Ala Thr Ala Ser Gln Glu Leu Gly Tyr Gly Cys Leu Lys Phe Gly
     50                  55                  60

Gly Gln Ala Tyr Ser Asp Val Glu His Thr Ser Val Gln Cys His Ala
 65                  70                  75                  80

Leu Asp Gly Ile Glu Cys Ala Ser Pro Arg Thr Phe Leu Arg Glu Asn
                 85                  90                  95

Lys Pro Cys Ile Lys Tyr Thr Gly His Tyr Phe Ile Thr Thr Leu Leu
            100                 105                 110
```

```
Tyr Ser Phe Phe Leu Gly Cys Phe Gly Val Asp Arg Phe Cys Leu Gly
        115                 120                 125

His Thr Gly Thr Ala Val Gly Lys Leu Leu Thr Leu Gly Gly Leu Gly
    130                 135                 140

Ile Trp Trp Phe Val Asp Leu Ile Leu Leu Ile Thr Gly Gly Leu Met
145                 150                 155                 160

Pro Ser Asp Gly Ser Asn Trp Cys Thr Val Tyr
                165                 170
```

<210> 59
<211> 125
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 59

```
Met Leu Ser Gln Pro Arg Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr
  1               5                  10                  15

Ser Leu Gly Leu Ala Leu Leu Gly Leu Gly Val Val Leu Val Leu Ser
            20                  25                  30

Ser Phe Phe Ala Leu Gly Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe
        35                  40                  45

Gly Ile Leu Lys Glu Ala Arg Val Thr Val Phe Pro Phe Asn Ile Leu
    50                  55                  60

Asp Asn Pro Met Tyr Trp Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala
65                  70                  75                  80

Ile Met His Ala Ser Pro Thr Gly Leu Leu Leu Thr Val Leu Val Ala
                85                  90                  95

Leu Thr Tyr Ile Xaa Ala Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu
            100                 105                 110

Ile Tyr Arg Gln Lys Ala Ser Gly Ser His Lys Arg Ser
        115                 120                 125
```

<210> 60
<211> 310
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 60

```
Met Leu Leu Trp Leu Leu Gly Trp Leu Glu Cys Val His Asn Ser Arg
  1               5                  10                  15
```

```
Arg Ser Gln Gly Leu Pro Pro His Tyr Asp Asp Val Glu Val Phe Ile
            20                  25                  30

Leu Gln Leu Glu Gly Glu Lys His Trp Arg Leu Tyr His Pro Thr Val
        35                  40                  45

Pro Leu Ala Arg Glu Tyr Ser Val Glu Ala Glu Glu Arg Ile Gly Arg
    50                  55                  60

Pro Val His Glu Phe Met Leu Lys Pro Gly Asp Leu Leu Tyr Phe Pro
65                  70                  75                  80

Arg Gly Thr Ile His Gln Ala Asp Thr Pro Ala Gly Leu Ala His Ser
                85                  90                  95

Thr His Val Thr Ile Ser Thr Tyr Gln Asn Asn Ser Trp Gly Asp Phe
            100                 105                 110

Leu Leu Asp Thr Ile Ser Gly Leu Val Phe Asp Thr Ala Lys Glu Asp
        115                 120                 125

Val Glu Leu Arg Thr Gly Ile Pro Arg Gln Leu Leu Leu Xaa Val Glu
    130                 135                 140

Ser Thr Thr Val Ala Thr Arg Arg Leu Ser Gly Phe Leu Arg Thr Leu
145                 150                 155                 160

Ala Asp Arg Leu Glu Gly Thr Lys Glu Leu Leu Ser Ser Asp Met Lys
                165                 170                 175

Lys Asp Phe Ile Met His Arg Leu Pro Pro Tyr Ser Ala Gly Asp Gly
            180                 185                 190

Ala Glu Leu Ser Thr Pro Gly Gly Lys Leu Pro Arg Leu Asp Ser Val
        195                 200                 205

Val Arg Leu Gln Phe Lys Asp His Ile Val Leu Thr Val Leu Pro Asp
    210                 215                 220

Gln Asp Gln Ser Asp Glu Ala Gln Glu Lys Met Val Tyr Ile Tyr His
225                 230                 235                 240

Ser Leu Lys Asn Ser Arg Glu Thr His Met Met Gly Asn Glu Glu Glu
                245                 250                 255

Thr Glu Phe His Gly Leu Arg Phe Pro Leu Ser His Leu Asp Ala Leu
            260                 265                 270

Lys Gln Ile Trp Asn Ser Pro Ala Ile Ser Val Lys Asp Leu Lys Leu
        275                 280                 285

Thr Thr Asp Glu Glu Lys Glu Ser Leu Val Leu Ser Leu Trp Thr Glu
    290                 295                 300

Cys Leu Ile Gln Val Val
305                 310
```

<210> 61
<211> 163
<212> PRT

<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 61
Met Xaa Gly Leu Leu Leu Ala Ala Phe Leu Ala Leu Val Ser Val Pro
 1   5   10   15

Arg Ala Gln Ala Val Trp Leu Gly Arg Leu Asp Pro Glu Gln Leu Leu
            20   25   30

Gly Pro Trp Tyr Val Leu Ala Val Ala Ser Arg Glu Lys Gly Phe Ala
        35   40   45

Met Glu Lys Asp Met Lys Asn Val Val Gly Val Val Val Thr Leu Thr
    50   55   60

Pro Glu Asn Asn Leu Arg Thr Leu Ser Ser Gln His Gly Leu Gly Gly
65   70   75   80

Cys Asp Gln Ser Val Met Asp Leu Ile Lys Arg Asn Ser Gly Trp Val
                85   90   95

Phe Glu Asn Pro Ser Ile Gly Val Leu Glu Leu Trp Val Leu Ala Thr
            100   105   110

Asn Phe Arg Asp Tyr Ala Ile Ile Phe Thr Gln Leu Glu Phe Gly Asp
        115   120   125

Glu Pro Phe Asn Thr Val Glu Leu Tyr Ser Leu Thr Glu Thr Ala Ser
    130   135   140

Gln Glu Ala Met Gly Leu Phe Thr Lys Trp Ser Arg Ser Leu Gly Phe
145   150   155   160

Leu Ser Gln

<210> 62
<211> 239
<212> PRT
<213> Homo sapiens

<400> 62
Met Arg Ala Leu Arg Arg Leu Ile Gln Gly Arg Ile Leu Leu Leu Thr
 1   5   10   15

Ile Cys Ala Ala Gly Ile Gly Gly Thr Phe Gln Phe Gly Tyr Asn Leu
            20   25   30

Ser Ile Ile Asn Ala Pro Thr Leu His Ile Gln Glu Phe Thr Asn Glu
        35   40   45

Thr Trp Gln Ala Arg Thr Gly Glu Pro Leu Pro Asp His Leu Val Leu
    50   55   60

Leu Met Trp Ser Leu Ile Val Ser Leu Tyr Pro Leu Gly Gly Leu Phe
65   70   75   80

```
Gly Ala Leu Leu Ala Gly Pro Leu Ala Ile Thr Leu Gly Arg Lys Lys
                85                  90                  95

Ser Leu Leu Val Asn Asn Ile Phe Val Val Ser Ala Ala Ile Leu Phe
            100                 105                 110

Gly Phe Ser Arg Lys Ala Gly Ser Phe Glu Met Ile Met Leu Gly Arg
        115                 120                 125

Leu Leu Val Gly Val Asn Ala Gly Val Ser Met Asn Ile Gln Pro Met
    130                 135                 140

Tyr Leu Gly Glu Ser Ala Pro Lys Glu Leu Arg Gly Ala Val Ala Met
145                 150                 155                 160

Ser Ser Ala Ile Phe Thr Ala Leu Gly Ile Val Met Gly Gln Val Val
                165                 170                 175

Gly Leu Ser Thr Thr Ala Ala Pro Gly Leu Arg Gly Leu Gly Arg Gly
            180                 185                 190

Ala Gly Gly Ala Gly Gly Gly Ala Arg Cys Leu Pro Gly Leu Pro Cys
        195                 200                 205

Pro Ala Pro Met Gly Ala Val Pro Ala Ser Gly Pro Glu Glu Thr Gly
    210                 215                 220

Asp Lys Pro Arg Gly Ser Gly Gln Cys His Gly Ala Leu Arg Glu
225                 230                 235
```

<210> 63
<211> 129
<212> PRT
<213> Homo sapiens

<400> 63

```
Met Glu Arg Trp Val Asp Asp Ala Phe Trp Ser Phe Leu Phe Ser Leu
  1               5                  10                  15

Ile Leu Ile Val Ile Met Phe Leu Trp Arg Pro Ser Ala Asn Asn Gln
            20                  25                  30

Arg Tyr Ala Phe Met Pro Leu Ile Asp Asp Ser Asp Asp Glu Ile Glu
        35                  40                  45

Glu Phe Met Val Thr Ser Glu Asn Leu Thr Glu Gly Ile Lys Leu Arg
    50                  55                  60

Ala Ser Lys Ser Val Ser Asn Gly Thr Ala Lys Pro Ala Thr Ser Glu
65                  70                  75                  80

Asn Phe Asp Glu Asp Leu Lys Trp Val Glu Glu Asn Ile Pro Ser Ser
                85                  90                  95

Phe Thr Asp Val Ala Leu Pro Val Leu Val Asp Ser Asp Glu Glu Ile
            100                 105                 110
```

```
Met Thr Arg Ser Glu Met Ala Glu Lys Met Phe Ser Ser Glu Lys Ile
        115                 120                 125

Met


<210> 64
<211> 60
<212> PRT
<213> Homo sapiens

<400> 64
Met Phe Glu Cys Val Ile Leu Val Ser Phe Leu Val Val Phe Val Val
  1               5                  10                  15

Val Arg Cys Val Gly Leu Ile Pro Thr Gly Gln Ser Lys Glu Phe Gln
             20                  25                  30

His Pro Leu Pro Ala Cys Ser Cys Tyr Pro Thr Asp Gln Thr Leu Asn
         35                  40                  45

Ser Ser Trp Gly Cys Cys Leu Ala Pro His His Asp
     50                  55                  60

<210> 65
<211> 381
<212> PRT
<213> Homo sapiens

<400> 65
Met Leu Leu Ser Ile Gly Met Leu Met Leu Ser Ala Thr Gln Val Tyr
  1               5                  10                  15

Thr Ile Leu Thr Val Gln Leu Phe Ala Phe Leu Asn Leu Leu Pro Val
             20                  25                  30

Glu Ala Asp Ile Leu Ala Tyr Asn Phe Glu Asn Ala Ser Gln Thr Phe
         35                  40                  45

Asp Asp Leu Pro Ala Arg Phe Gly Tyr Arg Leu Pro Ala Glu Gly Leu
     50                  55                  60

Lys Gly Phe Leu Ile Asn Ser Lys Pro Glu Asn Ala Cys Glu Pro Ile
 65                  70                  75                  80

Val Pro Pro Pro Val Lys Asp Asn Ser Ser Gly Thr Phe Ile Val Leu
                 85                  90                  95

Ile Arg Arg Leu Asp Cys Asn Phe Asp Ile Lys Val Leu Asn Ala Gln
            100                 105                 110

Arg Ala Gly Tyr Lys Ala Ala Ile Val His Asn Val Asp Ser Asp Asp
        115                 120                 125

Leu Ile Ser Met Gly Ser Asn Asp Ile Glu Val Leu Lys Lys Ile Asp
    130                 135                 140

Ile Pro Ser Val Phe Ile Gly Glu Ser Ser Ala Asn Ser Leu Lys Asp
145                 150                 155                 160

Glu Phe Thr Tyr Glu Lys Gly Gly His Leu Ile Leu Val Pro Glu Phe
```

```
                165                 170                 175

Ser Leu Pro Leu Glu Tyr Tyr Leu Ile Pro Phe Leu Ile Ile Val Gly
            180                 185                 190

Ile Cys Leu Ile Leu Ile Val Ile Phe Met Ile Thr Lys Phe Val Gln
        195                 200                 205

Asp Arg His Arg Ala Arg Arg Asn Arg Leu Arg Lys Asp Gln Leu Lys
    210                 215                 220

Lys Leu Pro Val His Lys Phe Lys Lys Gly Asp Glu Tyr Asp Val Cys
225                 230                 235                 240

Ala Ile Cys Leu Asp Glu Tyr Glu Asp Gly Asp Lys Leu Arg Ile Leu
                245                 250                 255

Pro Cys Ser His Ala Tyr His Cys Lys Cys Val Asp Pro Trp Leu Thr
            260                 265                 270

Lys Thr Lys Lys Thr Cys Pro Val Cys Lys Gln Lys Val Val Pro Ser
        275                 280                 285

Gln Gly Asp Ser Asp Ser Asp Thr Asp Ser Ser Gln Glu Glu Asn Glu
    290                 295                 300

Val Thr Glu His Thr Pro Leu Leu Arg Pro Leu Ala Ser Val Ser Ala
305                 310                 315                 320

Gln Ser Phe Gly Ala Leu Ser Glu Ser Arg Ser His Gln Asn Met Thr
                325                 330                 335

Glu Ser Ser Asp Tyr Glu Glu Asp Asp Asn Glu Asp Thr Asp Ser Ser
            340                 345                 350

Asp Ala Glu Asn Glu Ile Asn Glu His Asp Val Val Val Gln Leu Gln
        355                 360                 365

Pro Asn Gly Glu Arg Asp Tyr Asn Ile Ala Asn Thr Val
    370                 375                 380

<210> 66
<211> 53
<212> PRT
<213> Homo sapiens

<400> 66
Met Ala Ala Leu Leu Leu Ala Gly Ile Cys Ile Leu Leu Asn Gly Val
  1               5                  10                  15

Ile Pro Gln Asp Gln Ser Ile Val Arg Thr Ser Leu Ala Val Leu Gly
             20                  25                  30

Lys Gly Cys Leu Ala Ala Ser Phe Asn Cys Ile Phe Leu Tyr Thr Gly
         35                  40                  45

Asn Cys Ile Pro Gln
     50

<210> 67
<211> 63
```

<212> PRT
<213> Homo sapiens

<400> 67
Met His Trp Asn Leu Pro Gln Val Asn Leu Phe Ala Leu Leu Leu Leu
1 5 10 15

Thr Ile Leu Thr Leu Val Pro His Leu Val Val Pro Tyr His His Arg
20 25 30

His Tyr Gln Ala Gln Gln Asn Asn Arg Glu Pro Tyr Leu Gln Asn Cys
35 40 45

Gln Ala His His Leu His Gln Leu Leu Pro Phe His Arg Asp Gln
50 55 60

<210> 68
<211> 106
<212> PRT
<213> Homo sapiens

<400> 68
Met Phe Cys Phe Tyr Leu Asn Tyr Phe Thr Asn Leu Phe Leu Phe Leu
1 5 10 15

Thr Cys Ser Arg Ser Glu Ser Leu Ser Ser Pro Thr Gly Pro Tyr Ser
20 25 30

Gly Phe Pro Phe Leu Lys Ser Pro Pro Val Arg Asn Ser Leu Asn Lys
35 40 45

Gly Pro Leu Leu Val Gln Tyr Tyr Ser Phe Ser Ser His Leu Arg Val
50 55 60

Pro Arg Lys Lys Lys Gln Val Ile Arg Val Pro Val Arg Val Pro Pro
65 70 75 80

Lys Ser Pro Ala Met Ser Pro Pro Ser Ser Pro Arg Phe His Phe Phe
85 90 95

Thr Phe Ser Gly Pro Phe Pro Asn Ser Tyr
100 105

<210> 69
<211> 44
<212> PRT
<213> Homo sapiens

<400> 69
Met Arg Lys Thr Ala Trp Leu Cys Phe Phe Phe Gln Leu Cys Gly Leu
1 5 10 15

Gly Gln Val Thr Ser Leu Gln Tyr Arg Asn Cys Asn Val Glu Ile Lys
20 25 30

Pro Ser Leu Val Arg Gly Thr His Arg Ser Ile Pro
35 40

<210> 70
<211> 42
<212> PRT
<213> Homo sapiens

<400> 70
Met Asn Leu Leu Leu Leu Val Ser Thr Trp Met Met Leu Ile Gln Glu
  1   5   10   15

Gly Ser Cys Phe His Met Thr Leu Met Asn Glu Leu Ala Lys Arg Cys
             20   25   30

Tyr Trp Ser Tyr Phe Val Arg Ser His Ile
         35   40

<210> 71
<211> 57
<212> PRT
<213> Homo sapiens

<400> 71
Met Pro Cys Thr Cys Thr Trp Arg Asn Trp Arg Gln Trp Ile Arg Pro
  1   5   10   15

Leu Val Ala Val Ile Tyr Leu Val Ser Ile Val Val Ala Val Pro Leu
             20   25   30

Cys Val Trp Glu Leu Gln Lys Leu Glu Val Gly Ile His Thr Lys Ala
         35   40   45

Trp Phe Ile Ala Gly Ile Phe Leu Leu
     50   55

<210> 72
<211> 44
<212> PRT
<213> Homo sapiens

<400> 72
Met Lys Ser His Ala Thr Leu Thr Gly Gly Ser Gly Phe Tyr Phe Ile
  1   5   10   15

Glu Leu Ser Phe Leu Leu Leu Arg Ser Val Leu Leu Val Leu Val Leu
             20   25   30

Leu Trp Gln Phe Pro Lys Ser Leu Thr Gly Gln Glu
         35   40

<210> 73
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 73
Met Gly Ile Phe Ser Thr Leu Leu Leu Ala Ser Asp Ser Leu Leu Asn
1 5 10 15

Leu Ile Leu Phe Phe Phe Ile Phe Ala Phe Ser Val Lys Leu Ser Ser
20 25 30

Ser Ser Phe Pro Ser Cys Cys Val Ser Val Xaa Xaa Leu Ser Val Ile
35 40 45

Xaa Glu Ser Xaa Ser Ser His Xaa Ala Thr Cys Ala His Thr Ser Leu
50 55 60

Ser Gly Thr Pro Val Met
65 70

<210> 74
<211> 43
<212> PRT
<213> Homo sapiens

<400> 74
Met Met Ser Pro Ser Gly Ile Ile Val Tyr Val Ser Ala Thr Pro His
1 5 10 15

Ile Leu Leu Cys Ile Leu Ile Thr Phe Met Leu Ala Ile Pro Ser Ile
20 25 30

His Asn Gly Arg Val Cys Val Leu Phe Ile Phe
35 40

<210> 75
<211> 42
<212> PRT
<213> Homo sapiens

<400> 75
Met His Val His Cys Phe Ala Ile His Val Leu Phe His Phe Cys Ser
1 5 10 15

Thr Ile Ser Ala Asp Ala Leu Ser Phe Cys Ile Phe Cys Tyr Gly Pro
20 25 30

Gln Thr Leu Ile Asp Met Tyr Trp Asn Ser

```
         35                  40

<210> 76
<211> 177
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 76
Met Phe Gln Val Arg Pro Gly Trp Gln Leu Leu Leu Val Met Phe Ser
  1               5                  10                  15

Ser Cys Ala Val Ser Asn Gln Leu Leu Val Trp Tyr Pro Ala Thr Ala
             20                  25                  30

Leu Ala Asp Asn Lys Pro Val Ala Pro Asp Arg Arg Ile Ser Gly His
         35                  40                  45

Val Gly Ile Ile Phe Ser Met Ser Tyr Leu Glu Ser Lys Gly Leu Leu
     50                  55                  60

Ala Thr Xaa Ser Glu Asp Arg Ser Val Arg Ile Trp Lys Val Gly Asp
 65                  70                  75                  80

Leu Arg Val Pro Gly Gly Arg Val Gln Asn Ile Gly His Cys Phe Gly
                 85                  90                  95

His Ser Ala Arg Val Trp Gln Val Lys Leu Leu Glu Asn Tyr Leu Ile
            100                 105                 110

Ser Ala Gly Glu Asp Cys Val Cys Leu Val Trp Ser His Glu Gly Glu
        115                 120                 125

Ile Leu Gln Ala Phe Arg Gly His Gln Asp Val Tyr Pro Val Val Val
    130                 135                 140

Gly Ala Glu Ile His Ala Glu Leu Tyr Gln Glu Leu Ala Tyr Leu Glu
145                 150                 155                 160

Thr Glu Thr Glu Ser Leu Ala His Leu Phe Ala Leu Val Pro Arg Pro
                165                 170                 175

Glu


<210> 77
<211> 48
<212> PRT
<213> Homo sapiens

<400> 77
Met Val Thr Phe Ala Ser Ser Thr Leu Trp Ile Ala Ala Phe Ser Tyr
  1               5                  10                  15

Met Met Val Trp Met Val Thr Ile Ile Gly Tyr Thr Leu Gly Ile Pro
             20                  25                  30
```

```
Asp Val Ile Met Gly Asp His Leu Pro Gly Cys Trp Asp Gln Arg Ala
         35                  40                  45


<210> 78
<211> 97
<212> PRT
<213> Homo sapiens

<400> 78
Met Leu Leu Ser Ile Gly Met Leu Met Leu Ser Ala Thr Gln Val Tyr
  1               5                  10                  15

Thr Ile Leu Thr Val Gln Leu Phe Ala Phe Leu Asn Leu Leu Pro Val
             20                  25                  30

Glu Ala Asp Ile Leu Ala Tyr Asn Phe Glu Asn Ala Ser Gln Thr Phe
         35                  40                  45

Asp Asp Leu Pro Ala Arg Phe Gly Tyr Arg Leu Pro Ala Glu Gly Leu
     50                  55                  60

Lys Gly Phe Leu Ile Asn Ser Lys Pro Glu Asn Ala Cys Glu Pro Ile
 65                  70                  75                  80

Val Pro Pro Pro Val Lys Asp Asn Ser Ser Gly His Phe His Arg Val
                 85                  90                  95

Asn


<210> 79
<211> 14
<212> PRT
<213> Homo sapiens

<400> 79
Asn Tyr Phe Pro Val His Thr Val Gln Pro Asn Trp Tyr Val
  1               5                  10

<210> 80
<211> 31
<212> PRT
<213> Homo sapiens

<400> 80
Pro Val Phe Thr Val Asn Phe Leu Ala Trp Val His Ala Pro Pro Val
  1               5                  10                  15

Ser Ile Thr Val Asp Leu Ile Pro Thr Leu Ala Gln Ala Trp Ser
             20                  25                  30

<210> 81
<211> 33
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 81
Trp Ile Gln Arg Ile Arg Thr Ser Ala Asp Gln Leu Gly Pro Lys Lys
1 5 10 15

Val Val Xaa Phe Gly Leu Ala Cys Cys Gly Val Ser Gly Leu Phe Tyr
20 25 30

Ala

<210> 82
<211> 351
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (326)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 82
Pro Pro Gly Leu Cys Ala Ala Ile Pro Leu Gln Thr Arg Ser Ala Gln
1 5 10 15

Gly Pro Trp Gly Gly Arg Gln Gly Ser Gly Trp Cys Trp Gly Thr Val
20 25 30

Val Gly Ser Gly Ser Ser Gly Gly Gly Asn Ala Phe Thr Gly Leu Gly
35 40 45

Pro Val Ser Thr Leu Pro Ser Leu His Gly Lys Gln Gly Val Thr Ser
50 55 60

Val Thr Cys His Gly Gly Tyr Val Tyr Thr Thr Gly Arg Xaa Gly Ala
65 70 75 80

Tyr Tyr Gln Leu Phe Val Arg Asp Gly Gln Leu Gln Pro Val Leu Arg
85 90 95

Gln Lys Ser Cys Arg Gly Met Asn Trp Leu Ala Gly Leu Arg Ile Val
100 105 110

Pro Asp Gly Ser Met Val Ile Leu Gly Phe His Ala Asn Glu Phe Val
115 120 125

Val Trp Asn Pro Arg Ser His Glu Lys Leu His Ile Val Asn Cys Gly
130 135 140

Gly Gly His Arg Ser Trp Ala Phe Ser Asp Thr Glu Ala Ala Met Ala
145 150 155 160

Phe Ala Tyr Leu Lys Asp Gly Asp Val Met Leu Tyr Arg Ala Leu Gly
165 170 175

Gly Cys Thr Arg Pro His Val Ile Leu Arg Glu Gly Leu His Gly Arg

```
            180                 185                 190

Glu Ile Thr Cys Val Lys Arg Val Gly Thr Ile Thr Leu Gly Pro Glu
        195                 200                 205

Tyr Gly Val Pro Ser Phe Met Gln Pro Asp Asp Leu Glu Pro Gly Ser
    210                 215                 220

Glu Gly Pro Asp Leu Thr Asp Ile Val Ile Thr Cys Ser Glu Asp Thr
225                 230                 235                 240

Thr Val Cys Val Leu Ala Leu Pro Thr Thr Thr Gly Ser Ala His Ala
                245                 250                 255

Leu Thr Ala Val Cys Asn His Ile Ser Ser Val Arg Ala Val Ala Val
            260                 265                 270

Trp Gly Ile Gly Thr Pro Gly Gly Pro Gln Asp Pro Gln Pro Gly Leu
        275                 280                 285

Thr Ala His Val Val Ser Ala Gly Gly Arg Ala Glu Met His Cys Phe
    290                 295                 300

Ser Ile Met Val Thr Pro Asp Pro Ser Thr Pro Ser Arg Leu Ala Cys
305                 310                 315                 320

His Val Met His Leu Xaa Ser His Arg Leu Asp Glu Tyr Trp Asp Arg
                325                 330                 335

Gln Arg Asn Arg His Arg Met Val Lys Val Asp Pro Glu Thr Arg
            340                 345                 350
```

<210> 83
<211> 38
<212> PRT
<213> Homo sapiens

<400> 83

```
Pro Pro Gly Leu Cys Ala Ala Ile Pro Leu Gln Thr Arg Ser Ala Gln
  1               5                  10                  15

Gly Pro Trp Gly Gly Arg Gln Gly Ser Gly Trp Cys Trp Gly Thr Val
             20                  25                  30

Val Gly Ser Gly Ser Ser
         35
```

<210> 84
<211> 40
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 84

```
Gly Gly Gly Asn Ala Phe Thr Gly Leu Gly Pro Val Ser Thr Leu Pro
  1               5                  10                  15
```

```
Ser Leu His Gly Lys Gln Gly Val Thr Ser Val Thr Cys His Gly Gly
            20                  25                  30

Tyr Val Tyr Thr Thr Gly Arg Xaa
        35                  40

<210> 85
<211> 40
<212> PRT
<213> Homo sapiens

<400> 85
Gly Ala Tyr Tyr Gln Leu Phe Val Arg Asp Gly Gln Leu Gln Pro Val
  1               5                  10                  15

Leu Arg Gln Lys Ser Cys Arg Gly Met Asn Trp Leu Ala Gly Leu Arg
            20                  25                  30

Ile Val Pro Asp Gly Ser Met Val
        35                  40

<210> 86
<211> 41
<212> PRT
<213> Homo sapiens

<400> 86
Ile Leu Gly Phe His Ala Asn Glu Phe Val Val Trp Asn Pro Arg Ser
  1               5                  10                  15

His Glu Lys Leu His Ile Val Asn Cys Gly Gly Gly His Arg Ser Trp
            20                  25                  30

Ala Phe Ser Asp Thr Glu Ala Ala Met
        35                  40

<210> 87
<211> 42
<212> PRT
<213> Homo sapiens

<400> 87
Ala Phe Ala Tyr Leu Lys Asp Gly Asp Val Met Leu Tyr Arg Ala Leu
  1               5                  10                  15

Gly Gly Cys Thr Arg Pro His Val Ile Leu Arg Glu Gly Leu His Gly
            20                  25                  30

Arg Glu Ile Thr Cys Val Lys Arg Val Gly
        35                  40

<210> 88
<211> 43
<212> PRT
<213> Homo sapiens

<400> 88
Thr Ile Thr Leu Gly Pro Glu Tyr Gly Val Pro Ser Phe Met Gln Pro
  1               5                  10                  15

Asp Asp Leu Glu Pro Gly Ser Glu Gly Pro Asp Leu Thr Asp Ile Val
```

```
            20                  25                  30

Ile Thr Cys Ser Glu Asp Thr Thr Val Cys Val
        35                  40

<210> 89
<211> 41
<212> PRT
<213> Homo sapiens

<400> 89
Leu Ala Leu Pro Thr Thr Thr Gly Ser Ala His Ala Leu Thr Ala Val
  1               5                  10                  15

Cys Asn His Ile Ser Ser Val Arg Ala Val Ala Val Trp Gly Ile Gly
            20                  25                  30

Thr Pro Gly Gly Pro Gln Asp Pro Gln
        35                  40

<210> 90
<211> 40
<212> PRT
<213> Homo sapiens

<400> 90
Pro Gly Leu Thr Ala His Val Val Ser Ala Gly Gly Arg Ala Glu Met
  1               5                  10                  15

His Cys Phe Ser Ile Met Val Thr Pro Asp Pro Ser Thr Pro Ser Arg
            20                  25                  30

Leu Ala Cys His Val Met His Leu
        35                  40

<210> 91
<211> 26
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 91
Xaa Ser His Arg Leu Asp Glu Tyr Trp Asp Arg Gln Arg Asn Arg His
  1               5                  10                  15

Arg Met Val Lys Val Asp Pro Glu Thr Arg
            20                  25

<210> 92
<211> 88
<212> PRT
<213> Homo sapiens

<400> 92
Leu Met Ser Leu Leu Thr Ser Pro His Gln Pro Pro Pro Pro Pro Pro
  1               5                  10                  15
```

```
Ala Ser Ala Ser Pro Ser Ala Val Pro Asn Gly Pro Gln Ser Pro Lys
            20                  25                  30

Gln Gln Lys Glu Pro Leu Ser His Arg Phe Asn Glu Phe Met Thr Ser
        35                  40                  45

Lys Pro Lys Ile His Cys Phe Arg Ser Leu Lys Arg Gly Val Ser Ser
    50                  55                  60

Ala Pro Glu Ser Cys Leu Ser Gly Val Leu Trp Leu His Val Trp Phe
65                  70                  75                  80

Cys Ile Thr Asn Phe Val Cys Glu
                85
```

<210> 93
<211> 53
<212> PRT
<213> Homo sapiens

```
<400> 93
Phe Gln Asn Ala Lys Glu Glu Ala Ser Val Leu Pro Tyr Val Glu Thr
  1               5                  10                  15

Val Phe Leu Phe Gly Gly Gly Ile Phe Ala Met Ala Leu Cys Leu Ile
            20                  25                  30

Ser Asp Ala Leu Ser Ser Tyr Arg Asp Ser His Thr Asn Arg Val Leu
        35                  40                  45

Thr Ser Pro Pro Phe
    50
```

<210> 94
<211> 45
<212> PRT
<213> Homo sapiens

```
<400> 94
Arg Leu Met Pro Phe Pro Pro Ser Ser Pro Arg Leu Leu Val Thr Leu
  1               5                  10                  15

Ala Gly Arg Glu Asp Val Val Gly His Ser Cys Asn Thr Leu Ser Ala
            20                  25                  30

His Leu Leu Glu Ile Val Thr Met Leu Ile Thr Trp Phe
        35                  40                  45
```

<210> 95
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<400> 95
Gly Gly Xaa Asp Asp Asp Glu Gly Pro Tyr Thr Pro Phe Asp Thr Pro
  1               5                  10                  15
```

```
Ser Gly Lys Leu Glu Thr Val Lys Trp Ala Phe Thr Trp Pro Leu Ser
            20                  25                  30

Phe Val Leu Tyr Phe Thr Val Pro Asn Cys Asn Lys Pro Arg Trp Glu
        35                  40                  45

Lys Trp Phe
    50
```

<210> 96
<211> 115
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 96

```
Gly Gly Pro Arg Met Lys Arg Ser Gly Asn Pro Gly Ala Glu Val Thr
  1               5                  10                  15

Asn Ser Ser Val Ala Gly Pro Asp Cys Cys Gly Gly Leu Gly Asn Ile
            20                  25                  30

Asp Phe Arg Gln Ala Asp Phe Cys Val Met Thr Arg Leu Leu Gly Tyr
        35                  40                  45

Val Asp Pro Leu Asp Pro Ser Phe Val Ala Ala Val Ile Thr Ile Thr
    50                  55                  60

Phe Asn Pro Leu Tyr Trp Asn Val Val Ala Arg Trp Glu His Lys Thr
65                  70                  75                  80

Arg Lys Leu Ser Arg Ala Phe Gly Ser Pro Tyr Leu Ala Cys Tyr Ser
                85                  90                  95

Leu Ser Xaa Thr Ile Leu Leu Leu Asn Phe Leu Arg Ser His Cys Phe
            100                 105                 110

Thr Gln Ala
        115
```

<210> 97
<211> 51
<212> PRT
<213> Homo sapiens

<400> 97

```
Gly Gly Pro Arg Met Lys Arg Ser Gly Asn Pro Gly Ala Glu Val Thr
  1               5                  10                  15

Asn Ser Ser Val Ala Gly Pro Asp Cys Cys Gly Gly Leu Gly Asn Ile
            20                  25                  30

Asp Phe Arg Gln Ala Asp Phe Cys Val Met Thr Arg Leu Leu Gly Tyr
        35                  40                  45

Val Asp Pro
```

50

<210> 98
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 98
Leu Asp Pro Ser Phe Val Ala Ala Val Ile Thr Ile Thr Phe Asn Pro
1 5 10 15

Leu Tyr Trp Asn Val Val Ala Arg Trp Glu His Lys Thr Arg Lys Leu
20 25 30

Ser Arg Ala Phe Gly Ser Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Xaa
35 40 45

Thr Ile Leu Leu Leu Asn Phe Leu Arg Ser His Cys Phe Thr Gln Ala
50 55 60

<210> 99
<211> 253
<212> PRT
<213> Homo sapiens

<400> 99
Pro Gln Arg Ser Glu Leu Ala Ala Ala Ser Asn Arg Pro Cys Arg Val
1 5 10 15

Cys Ile Ser Leu Leu Leu Cys Leu Glu Asp Arg Thr Met Pro Lys Lys
20 25 30

Ala Lys Pro Thr Gly Ser Gly Lys Glu Glu Gly Pro Ala Pro Cys Lys
35 40 45

Gln Met Lys Leu Glu Ala Ala Gly Gly Pro Ser Ala Leu Asn Phe Asp
50 55 60

Ser Pro Ser Ser Leu Phe Glu Ser Leu Ile Ser Pro Ile Lys Thr Glu
65 70 75 80

Thr Phe Phe Lys Glu Phe Trp Glu Gln Lys Pro Leu Leu Ile Gln Arg
85 90 95

Asp Asp Pro Ala Leu Ala Thr Tyr Tyr Gly Ser Leu Phe Lys Leu Thr
100 105 110

Asp Leu Lys Ser Leu Cys Ser Arg Gly Met Tyr Tyr Gly Arg Asp Val
115 120 125

Asn Val Cys Arg Cys Val Asn Gly Lys Lys Lys Val Leu Asn Lys Asp
130 135 140

```
Gly Lys Ala His Phe Leu Gln Leu Arg Lys Asp Phe Asp Gln Lys Arg
145                 150                 155                 160

Ala Thr Ile Gln Phe His Gln Pro Gln Arg Phe Lys Asp Glu Leu Trp
                165                 170                 175

Arg Ile Gln Glu Lys Leu Glu Cys Tyr Phe Gly Ser Leu Val Gly Ser
            180                 185                 190

Asn Val Tyr Ile Thr Pro Ala Asp Leu Arg Ala Cys Arg Pro Ile Met
        195                 200                 205

Met Met Ser Arg Phe Ser Ser Cys Ser Trp Arg Glu Arg Asn Thr Gly
    210                 215                 220

Ala Ser Thr Thr Pro Leu Cys Pro Trp His Glu Ser Thr Ala Trp Arg
225                 230                 235                 240

Pro Arg Lys Gly Ser Ala Gly Arg Cys Met Ser Leu Cys
                245                 250

<210> 100
<211> 44
<212> PRT
<213> Homo sapiens

<400> 100
Pro Gln Arg Ser Glu Leu Ala Ala Ala Ser Asn Arg Pro Cys Arg Val
  1               5                  10                  15

Cys Ile Ser Leu Leu Leu Cys Leu Glu Asp Arg Thr Met Pro Lys Lys
            20                  25                  30

Ala Lys Pro Thr Gly Ser Gly Lys Glu Glu Gly Pro
         35                  40

<210> 101
<211> 45
<212> PRT
<213> Homo sapiens

<400> 101
Ala Pro Cys Lys Gln Met Lys Leu Glu Ala Ala Gly Gly Pro Ser Ala
  1               5                  10                  15

Leu Asn Phe Asp Ser Pro Ser Ser Leu Phe Glu Ser Leu Ile Ser Pro
            20                  25                  30

Ile Lys Thr Glu Thr Phe Phe Lys Glu Phe Trp Glu Gln
         35                  40                  45

<210> 102
<211> 44
<212> PRT
<213> Homo sapiens

<400> 102
Lys Pro Leu Leu Ile Gln Arg Asp Asp Pro Ala Leu Ala Thr Tyr Tyr
  1               5                  10                  15

Gly Ser Leu Phe Lys Leu Thr Asp Leu Lys Ser Leu Cys Ser Arg Gly
```

```
            20                  25                  30

Met Tyr Tyr Gly Arg Asp Val Asn Val Cys Arg Cys
        35                  40

<210> 103
<211> 45
<212> PRT
<213> Homo sapiens

<400> 103
Val Asn Gly Lys Lys Lys Val Leu Asn Lys Asp Gly Lys Ala His Phe
  1               5                  10                  15

Leu Gln Leu Arg Lys Asp Phe Asp Gln Lys Arg Ala Thr Ile Gln Phe
            20                  25                  30

His Gln Pro Gln Arg Phe Lys Asp Glu Leu Trp Arg Ile
        35                  40                  45

<210> 104
<211> 44
<212> PRT
<213> Homo sapiens

<400> 104
Gln Glu Lys Leu Glu Cys Tyr Phe Gly Ser Leu Val Gly Ser Asn Val
  1               5                  10                  15

Tyr Ile Thr Pro Ala Asp Leu Arg Ala Cys Arg Pro Ile Met Met Met
            20                  25                  30

Ser Arg Phe Ser Ser Cys Ser Trp Arg Glu Arg Asn
        35                  40

<210> 105
<211> 31
<212> PRT
<213> Homo sapiens

<400> 105
Thr Gly Ala Ser Thr Thr Pro Leu Cys Pro Trp His Glu Ser Thr Ala
  1               5                  10                  15

Trp Arg Pro Arg Lys Gly Ser Ala Gly Arg Cys Met Ser Leu Cys
            20                  25                  30

<210> 106
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 106
Gly Gly Gly Ile His Arg Leu His Asn Gly Ala Leu Gln Leu Arg Val
  1               5                  10                  15
```

```
Leu Gln Arg Val Glu His Leu His Leu Leu His His Ala Val Lys His
            20                  25                  30

Ile Cys Thr Ala Ser Leu Pro Val Leu His Gly Phe Ile Ala Ala Gln
        35                  40                  45

Cys Arg Pro Gly Xaa
    50
```

<210> 107
<211> 162
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 107

```
Gly Gly Gly His Arg His Asn Gly Ala Arg Val Arg Val His His His
  1               5                  10                  15

His Ala Val Lys His Cys Thr Ala Ser Val His Gly Ala Ala Cys Arg
            20                  25                  30

Gly Xaa Met Xaa Gly Ala Ala Ala Val Ser Val Arg Ala Ala Val Trp
        35                  40                  45

Gly Arg Asp Gly Trp Tyr Val Ala Val Ala Ser Arg Lys Gly Ala Met
    50                  55                  60

Lys Asp Met Lys Asn Val Val Gly Val Val Val Thr Thr Asn Asn Arg
65                  70                  75                  80

Thr Ser Ser His Gly Gly Gly Cys Asp Ser Val Met Asp Lys Arg Asn
                85                  90                  95

Ser Gly Trp Val Asn Ser Gly Val Trp Val Ala Thr Asn Arg Asp Tyr
            100                 105                 110

Ala Thr Gly Asp Asn Thr Val Tyr Ser Thr Thr Ala Ser Ala Met Gly
        115                 120                 125

Thr Lys Trp Ser Arg Ser Gly Ser Ser His Asp Ala Lys Trp Asn Ser
    130                 135                 140

Ala Ser Val Lys Asp Lys Thr Thr Asp Lys Ser Val Ser Trp Thr Cys
145                 150                 155                 160

Val Val
```

<210> 108
<211> 151
<212> PRT

<213> Homo sapiens

<400> 108
Trp Asp Arg Trp Ser Asp Ser Ala Leu Arg Arg Leu Arg Gly Ser Gly
1 5 10 15

Asp Leu Ala Gly Glu Leu Glu Glu Leu Glu Glu Glu Arg Ala Ala Cys
20 25 30

Gln Gly Cys Arg Ala Arg Arg Pro Trp Glu Leu Phe Gln His Arg Ala
35 40 45

Leu Arg Arg Gln Val Thr Ser Leu Val Val Leu Gly Ser Ala Met Glu
50 55 60

Leu Cys Gly Asn Asp Ser Val Tyr Ala Tyr Ala Ser Ser Val Phe Arg
65 70 75 80

Lys Ala Gly Val Pro Glu Ala Lys Ile Gln Tyr Ala Ile Ile Gly Thr
85 90 95

Gly Ser Cys Glu Leu Leu Thr Ala Val Val Ser Val Ser Leu Glu Gly
100 105 110

Ala Leu Pro Pro Pro Ala Leu Trp Gly Gly Thr Pro Arg Ser Ser Ala
115 120 125

Leu Asn Gln Phe Thr Leu Gln Lys Lys Lys Lys Lys Lys Lys Lys Lys
130 135 140

Lys Lys Lys Lys Lys Lys Lys
145 150

<210> 109
<211> 37
<212> PRT
<213> Homo sapiens

<400> 109
Arg Arg Leu Arg Gly Ser Gly Asp Leu Ala Gly Glu Leu Glu Glu Leu
1 5 10 15

Glu Glu Glu Arg Ala Ala Cys Gln Gly Cys Arg Ala Arg Arg Pro Trp
20 25 30

Glu Leu Phe Gln His
35

<210> 110
<211> 29
<212> PRT
<213> Homo sapiens

<400> 110
Arg Gln Val Thr Ser Leu Val Val Leu Gly Ser Ala Met Glu Leu Cys
1 5 10 15

Gly Asn Asp Ser Val Tyr Ala Tyr Ala Ser Ser Val Phe
20 25

<210> 111

<211> 34
<212> PRT
<213> Homo sapiens

<400> 111
Thr Gly Ser Cys Glu Leu Leu Thr Ala Val Val Ser Val Ser Leu Glu
1 5 10 15

Gly Ala Leu Pro Pro Pro Ala Leu Trp Gly Gly Thr Pro Arg Ser Ser
20 25 30

Ala Leu

<210> 112
<211> 26
<212> PRT
<213> Homo sapiens

<400> 112
Leu Val Gly Val Asn Ala Gly Val Ser Met Asn Ile Gln Pro Met Tyr
1 5 10 15

Leu Gly Glu Ser Ala Pro Lys Glu Leu Arg
20 25

<210> 113
<211> 49
<212> PRT
<213> Homo sapiens

<400> 113
His Glu Leu Arg Leu Arg Lys Asn Thr Val Lys Phe Ser Leu Tyr Arg
1 5 10 15

His Phe Lys Asn Thr Leu Ile Phe Ala Val Leu Ala Ser Ile Val Phe
20 25 30

Met Gly Trp Thr Thr Lys Thr Phe Arg Ile Ala Lys Cys Gln Ser Asp
35 40 45

Trp

<210> 114
<211> 178
<212> PRT
<213> Homo sapiens

<400> 114
His Glu Leu Arg Leu Arg Lys Asn Thr Val Lys Phe Ser Leu Tyr Arg
1 5 10 15

His Phe Lys Asn Thr Leu Ile Phe Ala Val Leu Ala Ser Ile Val Phe
20 25 30

Met Gly Trp Thr Thr Lys Thr Phe Arg Ile Ala Lys Cys Gln Ser Asp
35 40 45

Trp Met Glu Arg Trp Val Asp Asp Ala Phe Trp Ser Phe Leu Phe Ser
50 55 60

```
Leu Ile Leu Ile Val Ile Met Phe Leu Trp Arg Pro Ser Ala Asn Asn
 65                  70                  75                  80

Gln Arg Tyr Ala Phe Met Pro Leu Ile Asp Asp Ser Asp Asp Glu Ile
                85                  90                  95

Glu Glu Phe Met Val Thr Ser Glu Asn Leu Thr Glu Gly Ile Lys Leu
            100                 105                 110

Arg Ala Ser Lys Ser Val Ser Asn Gly Thr Ala Lys Pro Ala Thr Ser
        115                 120                 125

Glu Asn Phe Asp Glu Asp Leu Lys Trp Val Glu Glu Asn Ile Pro Ser
    130                 135                 140

Ser Phe Thr Asp Val Ala Leu Pro Val Leu Val Asp Ser Asp Glu Glu
145                 150                 155                 160

Ile Met Thr Arg Ser Glu Met Ala Glu Lys Met Phe Ser Ser Glu Lys
                165                 170                 175

Ile Met
```

<210> 115
<211> 24
<212> PRT
<213> Homo sapiens

<400> 115
```
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Glu Ser Ile Ala Gln
  1               5                  10                  15

Arg Ser Tyr Phe Arg Thr Leu Leu
            20
```

<210> 116
<211> 104
<212> PRT
<213> Homo sapiens

<400> 116
```
Ala Asp Thr Asn Phe Thr Gln Glu Thr Ala Met Thr Met Ile Thr Pro
  1               5                  10                  15

Ser Ser Lys Leu Thr Leu Thr Lys Gly Asn Lys Ser Trp Ser Ser Thr
            20                  25                  30

Ala Val Ala Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn
        35                  40                  45

Ser Ala Arg Gly Ile Asn Cys Ser Ala Phe Leu Leu Pro Tyr Ser Ser
    50                  55                  60

His Val Trp Val Pro Leu Ser Gly Val Val Pro Leu Cys Gln Arg Asn
 65                  70                  75                  80

Gln Gly His Thr Val Trp Val Gln Ile Ile Tyr Ser Arg Ser Ser Phe
                85                  90                  95
```

Thr Asp Val Phe Ile Ser Thr Arg
100

<210> 117
<211> 26
<212> PRT
<213> Homo sapiens

<400> 117
Met Thr Met Ile Thr Pro Ser Ser Lys Leu Thr Leu Thr Lys Gly Asn
1 5 10 15

Lys Ser Trp Ser Ser Thr Ala Val Ala Ala
20 25

<210> 118
<211> 20
<212> PRT
<213> Homo sapiens

<400> 118
Arg Gly Ile Asn Cys Ser Ala Phe Leu Leu Pro Tyr Ser Ser His Val
1 5 10 15

Trp Val Pro Leu
20

<210> 119
<211> 24
<212> PRT
<213> Homo sapiens

<400> 119
Val Val Pro Leu Cys Gln Arg Asn Gln Gly His Thr Val Trp Val Gln
1 5 10 15

Ile Ile Tyr Ser Arg Ser Ser Phe
20

<210> 120
<211> 26
<212> PRT
<213> Homo sapiens

<400> 120
Asn Phe Asp Ile Lys Val Leu Asn Ala Gln Arg Ala Gly Tyr Lys Ala
1 5 10 15

Ala Ile Val His Asn Val Asp Ser Asp Asp
20 25

<210> 121
<211> 28
<212> PRT
<213> Homo sapiens

<400> 121
Val Leu Lys Lys Ile Asp Ile Pro Ser Val Phe Ile Gly Glu Ser Ser
1 5 10 15

Ala Asn Ser Leu Lys Asp Glu Phe Thr Tyr Glu Lys

20 25

<210> 122
<211> 30
<212> PRT
<213> Homo sapiens

<400> 122
Pro Glu Phe Ser Leu Pro Leu Glu Tyr Tyr Leu Ile Pro Phe Leu Ile
1 5 10 15

Ile Val Gly Ile Cys Leu Ile Leu Ile Val Ile Phe Met Ile
20 25 30

<210> 123
<211> 34
<212> PRT
<213> Homo sapiens

<400> 123
Thr Lys Phe Val Gln Asp Arg His Arg Ala Arg Arg Asn Arg Leu Arg
1 5 10 15

Lys Asp Gln Leu Lys Lys Leu Pro Val His Lys Phe Lys Lys Gly Asp
20 25 30

Glu Tyr

<210> 124
<211> 27
<212> PRT
<213> Homo sapiens

<400> 124
Glu Asp Gly Asp Lys Leu Arg Ile Leu Pro Cys Ser His Ala Tyr His
1 5 10 15

Cys Lys Cys Val Asp Pro Trp Leu Thr Lys Thr
20 25

<210> 125
<211> 24
<212> PRT
<213> Homo sapiens

<400> 125
Val Val Pro Ser Gln Gly Asp Ser Asp Ser Asp Thr Asp Ser Ser Gln
1 5 10 15

Glu Glu Asn Glu Val Thr Glu His
20

<210> 126
<211> 29
<212> PRT
<213> Homo sapiens

<400> 126
Gln Ser Phe Gly Ala Leu Ser Glu Ser Arg Ser His Gln Asn Met Thr
1 5 10 15

```
Glu Ser Ser Asp Tyr Glu Glu Asp Asp Asn Glu Asp Thr
            20                  25

<210> 127
<211> 259
<212> PRT
<213> Homo sapiens

<400> 127
Ile Arg Arg Leu Asp Cys Asn Phe Asp Ile Lys Val Leu Asn Ala Gln
  1               5                  10                  15

Arg Ala Gly Tyr Lys Ala Ala Ile Val His Asn Val Asp Ser Asp Asp
            20                  25                  30

Leu Ile Ser Met Gly Ser Asn Asp Ile Glu Val Leu Lys Lys Ile Asp
        35                  40                  45

Ile Pro Ser Val Phe Ile Gly Glu Ser Ser Ala Asn Ser Leu Lys Asp
    50                  55                  60

Glu Phe Thr Tyr Glu Lys Gly Gly His Leu Ile Leu Val Pro Glu Phe
65                  70                  75                  80

Ser Leu Pro Leu Glu Tyr Tyr Leu Ile Pro Phe Leu Ile Ile Val Gly
                85                  90                  95

Ile Cys Leu Ile Leu Ile Val Ile Phe Met Ile Thr Lys Phe Val Gln
            100                 105                 110

Asp Arg His Arg Ala Arg Arg Asn Arg Leu Arg Lys Asp Gln Leu Lys
        115                 120                 125

Lys Leu Pro Val His Lys Phe Lys Lys Gly Asp Glu Tyr Asp Val Cys
    130                 135                 140

Ala Ile Cys Leu Asp Glu Tyr Glu Asp Gly Asp Lys Leu Arg Ile Leu
145                 150                 155                 160

Pro Cys Ser His Ala Tyr His Cys Lys Cys Val Asp Pro Trp Leu Thr
                165                 170                 175

Lys Thr Lys Lys Thr Cys Pro Val Cys Lys Gln Lys Val Val Pro Ser
            180                 185                 190

Gln Gly Asp Ser Asp Ser Asp Thr Asp Ser Ser Gln Glu Glu Asn Glu
        195                 200                 205

Val Thr Glu His Thr Pro Leu Leu Arg Pro Leu Ala Ser Val Ser Ala
    210                 215                 220

Gln Ser Phe Gly Ala Leu Ser Glu Ser Arg Ser His Gln Asn Met Thr
225                 230                 235                 240

Glu Ser Ser Asp Tyr Glu Glu Asp Asp Asn Glu Asp Thr Asp Ser Ser
                245                 250                 255

Asp Ala Glu
```

<210> 128
<211> 97
<212> PRT
<213> Homo sapiens

<400> 128
Met Leu Leu Ser Ile Gly Met Leu Met Leu Ser Ala Thr Gln Val Tyr
1 5 10 15

Thr Ile Leu Thr Val Gln Leu Phe Ala Phe Leu Asn Leu Leu Pro Val
20 25 30

Glu Ala Asp Ile Leu Ala Tyr Asn Phe Glu Asn Ala Ser Gln Thr Phe
35 40 45

Asp Asp Leu Pro Ala Arg Phe Gly Tyr Arg Leu Pro Ala Glu Gly Leu
50 55 60

Lys Gly Phe Leu Ile Asn Ser Lys Pro Glu Asn Ala Cys Glu Pro Ile
65 70 75 80

Val Pro Pro Pro Val Lys Asp Asn Ser Ser Gly His Phe His Arg Val
85 90 95

Asn

<210> 129
<211> 36
<212> PRT
<213> Homo sapiens

<400> 129
Ala Gln Cys Ser Ile Tyr Leu Ile Gln Val Ile Phe Gly Ala Val Asp
1 5 10 15

Leu Pro Ala Lys Leu Val Gly Phe Leu Val Ile Asn Ser Leu Gly Arg
20 25 30

Arg Pro Ala Gln
35

<210> 130
<211> 188
<212> PRT
<213> Homo sapiens

<400> 130
Gly Thr Val Gln His Leu Pro Asn Pro Gly Asp Leu Trp Cys Cys Gly
1 5 10 15

Pro Ala Cys Gln Ala Cys Gly Leu Pro Cys His Gln Leu Pro Gly Ser
20 25 30

Pro Ala Cys Pro Asp Gly Cys Thr Ala Ala Gly Arg His Leu His Pro
35 40 45

Ala Gln Trp Gly Asp Thr Pro Gly Pro Val His Cys Pro Asn Leu Ser
50 55 60

Cys Cys Ala Gly Glu Gly Leu Ser Gly Cys Leu Leu Gln Leu His Leu

```
 65                  70                  75                  80

Pro Val Tyr Trp Glu Leu Tyr Pro Thr Met Ile Arg Gln Thr Gly Met
                 85                  90                  95

Gly Met Gly Ser Thr Met Ala Arg Val Gly Ser Ile Val Ser Pro Leu
            100                 105                 110

Val Ser Met Thr Ala Glu Leu Tyr Pro Ser Met Pro Leu Phe Ile Tyr
        115                 120                 125

Gly Ala Val Pro Val Ala Ala Ser Ala Val Thr Val Leu Leu Pro Glu
    130                 135                 140

Thr Leu Gly Gln Pro Leu Pro Asp Thr Val Gln Asp Leu Glu Ser Arg
145                 150                 155                 160

Lys Gly Lys Gln Thr Arg Gln Gln Gln Glu His Gln Lys Tyr Met Val
                165                 170                 175

Pro Leu Gln Ala Ser Ala Gln Glu Lys Asn Gly Leu
            180                 185

<210> 131
<211> 23
<212> PRT
<213> Homo sapiens

<400> 131
Leu Pro Asn Pro Gly Asp Leu Trp Cys Cys Gly Pro Ala Cys Gln Ala
  1               5                  10                  15

Cys Gly Leu Pro Cys His Gln
             20

<210> 132
<211> 26
<212> PRT
<213> Homo sapiens

<400> 132
Gly Cys Thr Ala Ala Gly Arg His Leu His Pro Ala Gln Trp Gly Asp
  1               5                  10                  15

Thr Pro Gly Pro Val His Cys Pro Asn Leu
             20                  25

<210> 133
<211> 22
<212> PRT
<213> Homo sapiens

<400> 133
Leu His Leu Pro Val Tyr Trp Glu Leu Tyr Pro Thr Met Ile Arg Gln
  1               5                  10                  15

Thr Gly Met Gly Met Gly
             20

<210> 134
<211> 23
```

<212> PRT
<213> Homo sapiens

<400> 134
Leu Val Ser Met Thr Ala Glu Leu Tyr Pro Ser Met Pro Leu Phe Ile
1 5 10 15

Tyr Gly Ala Val Pro Val Ala
20

<210> 135
<211> 27
<212> PRT
<213> Homo sapiens

<400> 135
Pro Asp Thr Val Gln Asp Leu Glu Ser Arg Lys Gly Lys Gln Thr Arg
1 5 10 15

Gln Gln Gln Glu His Gln Lys Tyr Met Val Pro
20 25

<210> 136
<211> 720
<212> PRT
<213> Homo sapiens

<400> 136
Cys Leu Glu Ala Ala Met Ile Glu Gly Glu Ile Glu Ser Leu His Ser
1 5 10 15

Glu Asn Ser Gly Lys Ser Gly Gln Glu His Trp Phe Thr Glu Leu Pro
20 25 30

Pro Val Leu Thr Phe Glu Leu Ser Arg Phe Glu Phe Asn Gln Ala Leu
35 40 45

Gly Arg Pro Glu Lys Ile His Asn Lys Leu Glu Phe Pro Gln Val Leu
50 55 60

Tyr Leu Asp Arg Tyr Met His Arg Asn Arg Glu Ile Thr Arg Ile Lys
65 70 75 80

Arg Glu Glu Ile Lys Arg Leu Lys Asp Tyr Leu Thr Val Leu Gln Gln
85 90 95

Arg Leu Glu Arg Tyr Leu Ser Tyr Gly Ser Gly Pro Lys Arg Phe Pro
100 105 110

Leu Val Asp Val Leu Gln Tyr Ala Leu Glu Phe Ala Ser Ser Lys Pro
115 120 125

Val Cys Thr Ser Pro Val Asp Asp Ile Asp Ala Ser Ser Pro Pro Ser
130 135 140

Gly Ser Ile Pro Ser Gln Thr Leu Pro Ser Thr Thr Glu Gln Gln Gly
145 150 155 160

Ala Leu Ser Ser Glu Leu Pro Ser Thr Ser Pro Ser Ser Val Ala Ala
165 170 175

```
Ile Ser Ser Arg Ser Val Ile His Lys Pro Phe Thr Gln Ser Arg Ile
            180                 185                 190

Pro Pro Asp Leu Pro Met His Pro Ala Pro Arg His Ile Thr Glu Glu
        195                 200                 205

Glu Leu Ser Val Leu Glu Ser Cys Leu His Arg Trp Arg Thr Glu Ile
    210                 215                 220

Glu Asn Asp Thr Arg Asp Leu Gln Glu Ser Ile Ser Arg Ile His Arg
225                 230                 235                 240

Thr Ile Glu Leu Met Tyr Ser Asp Lys Ser Met Ile Gln Val Pro Tyr
                245                 250                 255

Arg Leu His Ala Val Leu Val His Glu Gly Gln Ala Asn Ala Gly His
            260                 265                 270

Tyr Trp Ala Tyr Ile Phe Asp His Arg Glu Ser Arg Trp Met Lys Tyr
        275                 280                 285

Asn Asp Ile Ala Val Thr Lys Ser Ser Trp Glu Glu Leu Val Arg Asp
    290                 295                 300

Ser Phe Gly Gly Tyr Arg Asn Ala Ser Ala Tyr Cys Leu Met Tyr Ile
305                 310                 315                 320

Asn Asp Lys Ala Gln Phe Leu Ile Gln Glu Glu Phe Asn Lys Glu Thr
                325                 330                 335

Gly Gln Pro Leu Val Gly Ile Glu Thr Leu Pro Pro Asp Leu Arg Asp
            340                 345                 350

Phe Val Glu Glu Asp Asn Gln Arg Phe Glu Lys Glu Leu Glu Glu Trp
        355                 360                 365

Asp Ala Gln Leu Ala Gln Lys Ala Leu Gln Glu Lys Leu Leu Ala Ser
    370                 375                 380

Gln Lys Leu Arg Glu Ser Glu Thr Ser Val Thr Thr Ala Gln Ala Ala
385                 390                 395                 400

Gly Asp Pro Glu Tyr Leu Glu Gln Pro Ser Arg Ser Asp Phe Ser Lys
                405                 410                 415

His Leu Lys Glu Glu Thr Ile Gln Ile Ile Thr Lys Ala Ser His Glu
            420                 425                 430

His Glu Asp Lys Ser Pro Glu Thr Val Leu Gln Ser Ala Ile Lys Leu
        435                 440                 445

Glu Tyr Ala Arg Leu Val Lys Leu Ala Gln Glu Asp Thr Pro Pro Glu
    450                 455                 460

Thr Asp Tyr Arg Leu His His Val Val Val Tyr Phe Ile Gln Asn Gln
465                 470                 475                 480

Ala Pro Lys Lys Ile Ile Glu Lys Thr Leu Leu Glu Gln Phe Gly Asp
                485                 490                 495

Arg Asn Leu Ser Phe Asp Glu Arg Cys His Asn Ile Met Lys Val Ala
```

```
            500                 505                 510

Gln Ala Lys Leu Glu Met Ile Lys Pro Glu Glu Val Asn Leu Glu Glu
        515                 520                 525

Tyr Glu Glu Trp His Gln Asp Tyr Arg Lys Phe Arg Glu Thr Thr Met
    530                 535                 540

Tyr Leu Ile Ile Gly Leu Glu Asn Phe Gln Arg Glu Ser Tyr Ile Asp
545                 550                 555                 560

Ser Leu Leu Phe Leu Ile Cys Ala Tyr Gln Asn Asn Lys Glu Leu Leu
                565                 570                 575

Ser Lys Gly Leu Tyr Arg Gly His Asp Glu Glu Leu Ile Ser His Tyr
            580                 585                 590

Arg Arg Glu Cys Leu Leu Lys Leu Asn Glu Gln Ala Ala Glu Leu Phe
        595                 600                 605

Glu Ser Gly Glu Asp Arg Glu Val Asn Asn Gly Leu Ile Ile Met Asn
    610                 615                 620

Glu Phe Ile Val Pro Phe Leu Pro Leu Leu Leu Val Asp Glu Met Glu
625                 630                 635                 640

Glu Lys Asp Ile Leu Ala Val Glu Asp Met Arg Asn Arg Trp Cys Ser
                645                 650                 655

Tyr Leu Gly Gln Glu Met Glu Pro His Leu Gln Glu Lys Leu Thr Asp
            660                 665                 670

Phe Leu Pro Lys Leu Leu Asp Cys Ser Met Glu Ile Lys Ser Phe His
        675                 680                 685

Glu Pro Pro Lys Leu Pro Ser Tyr Ser Thr His Glu Leu Cys Glu Arg
    690                 695                 700

Phe Ala Arg Ile Met Leu Ser Leu Ser Arg Thr Pro Ala Asp Gly Arg
705                 710                 715                 720
```

<210> 137
<211> 24
<212> PRT
<213> Homo sapiens

```
<400> 137
Met Ile Glu Gly Glu Ile Glu Ser Leu His Ser Glu Asn Ser Gly Lys
  1               5                  10                  15

Ser Gly Gln Glu His Trp Phe Thr
             20
```

<210> 138
<211> 25
<212> PRT
<213> Homo sapiens

<400> 138
Phe Glu Leu Ser Arg Phe Glu Phe Asn Gln Ala Leu Gly Arg Pro Glu
1 5 10 15

Lys Ile His Asn Lys Leu Glu Phe Pro
20 25

<210> 139
<211> 26
<212> PRT
<213> Homo sapiens

<400> 139
Glu Ile Thr Arg Ile Lys Arg Glu Glu Ile Lys Arg Leu Lys Asp Tyr
1 5 10 15

Leu Thr Val Leu Gln Gln Arg Leu Glu Arg
20 25

<210> 140
<211> 27
<212> PRT
<213> Homo sapiens

<400> 140
Pro Lys Arg Phe Pro Leu Val Asp Val Leu Gln Tyr Ala Leu Glu Phe
1 5 10 15

Ala Ser Ser Lys Pro Val Cys Thr Ser Pro Val
20 25

<210> 141
<211> 26
<212> PRT
<213> Homo sapiens

<400> 141
Ile Pro Ser Gln Thr Leu Pro Ser Thr Thr Glu Gln Gln Gly Ala Leu
1 5 10 15

Ser Ser Glu Leu Pro Ser Thr Ser Pro Ser
20 25

<210> 142
<211> 24
<212> PRT
<213> Homo sapiens

<400> 142
Ser Val Ile His Lys Pro Phe Thr Gln Ser Arg Ile Pro Pro Asp Leu
1 5 10 15

Pro Met His Pro Ala Pro Arg His
20

<210> 143
<211> 23
<212> PRT
<213> Homo sapiens

<400> 143

```
Cys Leu His Arg Trp Arg Thr Glu Ile Glu Asn Asp Thr Arg Asp Leu
  1               5                  10                  15

Gln Glu Ser Ile Ser Arg Ile
             20
```

<210> 144
<211> 28
<212> PRT
<213> Homo sapiens

<400> 144

```
Lys Ser Met Ile Gln Val Pro Tyr Arg Leu His Ala Val Leu Val His
  1               5                  10                  15

Glu Gly Gln Ala Asn Ala Gly His Tyr Trp Ala Tyr
             20                  25
```

<210> 145
<211> 29
<212> PRT
<213> Homo sapiens

<400> 145

```
Arg Trp Met Lys Tyr Asn Asp Ile Ala Val Thr Lys Ser Ser Trp Glu
  1               5                  10                  15

Glu Leu Val Arg Asp Ser Phe Gly Gly Tyr Arg Asn Ala
             20                  25
```

<210> 146
<211> 24
<212> PRT
<213> Homo sapiens

<400> 146

```
Ile Asn Asp Lys Ala Gln Phe Leu Ile Gln Glu Glu Phe Asn Lys Glu
  1               5                  10                  15

Thr Gly Gln Pro Leu Val Gly Ile
             20
```

<210> 147
<211> 23
<212> PRT
<213> Homo sapiens

<400> 147

```
Met Ile Gln Val Pro Tyr Arg Leu His Ala Val Leu Val His Glu Gly
  1               5                  10                  15

Gln Ala Asn Ala Gly His Tyr
             20
```

<210> 148
<211> 26
<212> PRT
<213> Homo sapiens

<400> 148

```
Asp Asn Gln Arg Phe Glu Lys Glu Leu Glu Glu Trp Asp Ala Gln Leu
```

```
  1               5                  10                  15

Ala Gln Lys Ala Leu Gln Glu Lys Leu Leu
             20                  25

<210> 149
<211> 23
<212> PRT
<213> Homo sapiens

<400> 149
Ser Glu Thr Ser Val Thr Thr Ala Gln Ala Ala Gly Asp Pro Glu Tyr
  1               5                  10                  15

Leu Glu Gln Pro Ser Arg Ser
             20

<210> 150
<211> 28
<212> PRT
<213> Homo sapiens

<400> 150
Gln Ile Ile Thr Lys Ala Ser His Glu His Glu Asp Lys Ser Pro Glu
  1               5                  10                  15

Thr Val Leu Gln Ser Ala Ile Lys Leu Glu Tyr Ala
             20                  25

<210> 151
<211> 28
<212> PRT
<213> Homo sapiens

<400> 151
Leu Ala Gln Glu Asp Thr Pro Pro Glu Thr Asp Tyr Arg Leu His His
  1               5                  10                  15

Val Val Val Tyr Phe Ile Gln Asn Gln Ala Pro Lys
             20                  25

<210> 152
<211> 29
<212> PRT
<213> Homo sapiens

<400> 152
Gly Asp Arg Asn Leu Ser Phe Asp Glu Arg Cys His Asn Ile Met Lys
  1               5                  10                  15

Val Ala Gln Ala Lys Leu Glu Met Ile Lys Pro Glu Glu
             20                  25

<210> 153
<211> 26
<212> PRT
<213> Homo sapiens

<400> 153
Glu Glu Trp His Gln Asp Tyr Arg Lys Phe Arg Glu Thr Thr Met Tyr
  1               5                  10                  15
```

Leu Ile Ile Gly Leu Glu Asn Phe Gln Arg
20 25

<210> 154
<211> 29
<212> PRT
<213> Homo sapiens

<400> 154
Ile Cys Ala Tyr Gln Asn Asn Lys Glu Leu Leu Ser Lys Gly Leu Tyr
1 5 10 15

Arg Gly His Asp Glu Glu Leu Ile Ser His Tyr Arg Arg
20 25

<210> 155
<211> 28
<212> PRT
<213> Homo sapiens

<400> 155
Cys Leu Leu Lys Leu Asn Glu Gln Ala Ala Glu Leu Phe Glu Ser Gly
1 5 10 15

Glu Asp Arg Glu Val Asn Asn Gly Leu Ile Ile Met
20 25

<210> 156
<211> 31
<212> PRT
<213> Homo sapiens

<400> 156
Val Asp Glu Met Glu Glu Lys Asp Ile Leu Ala Val Glu Asp Met Arg
1 5 10 15

Asn Arg Trp Cys Ser Tyr Leu Gly Gln Glu Met Glu Pro His Leu
20 25 30

<210> 157
<211> 25
<212> PRT
<213> Homo sapiens

<400> 157
Gln Glu Lys Leu Thr Asp Phe Leu Pro Lys Leu Leu Asp Cys Ser Met
1 5 10 15

Glu Ile Lys Ser Phe His Glu Pro Pro
20 25

<210> 158
<211> 21
<212> PRT
<213> Homo sapiens

<400> 158
Gln Ile Ala Thr Ser Val His His Asn Ile Asn Arg Lys Lys Arg Ser
1 5 10 15

```
Val Leu Arg Leu Leu
            20

<210> 159
<211> 127
<212> PRT
<213> Homo sapiens

<400> 159
Gln Ile Ala Thr Ser Val His His Asn Ile Asn Arg Lys Lys Arg Ser
  1               5                  10                  15

Val Leu Arg Leu Leu Met Phe Cys Phe Tyr Leu Asn Tyr Phe Thr Asn
            20                  25                  30

Leu Phe Leu Phe Leu Thr Cys Ser Arg Ser Glu Ser Leu Ser Ser Pro
         35                  40                  45

Thr Gly Pro Tyr Ser Gly Phe Pro Phe Leu Lys Ser Pro Pro Val Arg
     50                  55                  60

Asn Ser Leu Asn Lys Gly Pro Leu Leu Val Gln Tyr Tyr Ser Phe Ser
 65                  70                  75                  80

Ser His Leu Arg Val Pro Arg Lys Lys Lys Gln Val Ile Arg Val Pro
                85                  90                  95

Val Arg Val Pro Pro Lys Ser Pro Ala Met Ser Pro Pro Ser Ser Pro
            100                 105                 110

Arg Phe His Phe Phe Thr Phe Ser Gly Pro Phe Pro Asn Ser Tyr
        115                 120                 125

<210> 160
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 160
Pro Leu Leu Arg Gly Leu Phe Ile Arg Xaa Arg Ala Gly His Tyr Glu
  1               5                  10                  15

Cys Val Phe His Glu Xaa Val Glu Gly Gly Ala Cys Cys Glu Gln Cys
            20                  25                  30



<210> 161
<211> 44
<212> PRT
```

<213> Homo sapiens

<400> 161
Leu Val Asn Asn Ser Phe Phe Leu Glu Phe Ile Tyr Arg Pro Asp Ser
1 5 10 15

Lys Asn Trp Gln Tyr Gln Glu Thr Ile Lys Lys Gly Asp Leu Leu Leu
20 25 30

Asn Arg Val Gln Lys Leu Ser Arg Val Ile Asn Met
35 40

<210> 162
<211> 34
<212> PRT
<213> Homo sapiens

<400> 162
Ile Arg Glu Leu Ser Arg Phe Ile Ala Ala Gly Arg Leu His Cys Lys
1 5 10 15

Ile Asp Lys Val Asn Glu Ile Val Glu Thr Asn Arg Tyr Ser His Phe
20 25 30

Ser Glu

<210> 163
<211> 76
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> MISC_FEATURE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 163
Pro Leu Leu Arg Gly Leu Phe Ile Arg Xaa Arg Ala Gly His Tyr Glu
1 5 10 15

Cys Val Phe His Glu Xaa Val Glu Gly Gly Ala Cys Cys Glu Gln Cys
20 25 30

Met Arg Lys Thr Ala Trp Leu Cys Phe Phe Phe Gln Leu Cys Gly Leu
35 40 45

Gly Gln Val Thr Ser Leu Gln Tyr Arg Asn Cys Asn Val Glu Ile Lys
50 55 60

Pro Ser Leu Val Arg Gly Thr His Arg Ser Ile Pro
65 70 75

<210> 164
<211> 195
<212> PRT

<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 164
Gly Ser Gln Pro Pro Gly Pro Val Pro Glu Xaa Leu Ile Arg Ile Tyr
1 5 10 15

Ser Met Arg Phe Cys Pro Tyr Ser His Arg Thr Arg Leu Val Leu Lys
20 25 30

Ala Lys Asp Ile Arg His Glu Val Val Asn Ile Asn Leu Arg Asn Lys
35 40 45

Pro Glu Trp Tyr Tyr Thr Lys His Pro Phe Gly His Ile Pro Val Leu
50 55 60

Glu Thr Ser Gln Cys Gln Leu Ile Tyr Glu Ser Val Ile Ala Cys Glu
65 70 75 80

Tyr Leu Asp Asp Ala Tyr Pro Gly Arg Lys Leu Phe Pro Tyr Asp Pro
85 90 95

Tyr Glu Arg Ala Arg Gln Lys Met Leu Leu Glu Leu Phe Cys Lys Val
100 105 110

Pro His Leu Thr Lys Glu Cys Leu Val Ala Leu Arg Cys Gly Arg Glu
115 120 125

Cys Thr Asn Leu Lys Ala Ala Leu Arg Gln Glu Phe Ser Asn Leu Glu
130 135 140

Glu Ile Leu Glu Tyr Gln Asn Thr Thr Phe Phe Gly Gly Thr Cys Ile
145 150 155 160

Ser Met Ile Asp Tyr Leu Leu Trp Pro Trp Phe Glu Arg Leu Asp Val
165 170 175

Tyr Gly Ile Leu Asp Cys Val Ser His Thr Pro Ala Cys Gly Ser Gly
180 185 190

Tyr Gln Pro
195

<210> 165
<211> 14
<212> PRT
<213> Homo sapiens

<400> 165
Leu Ala Ser Pro Phe Pro Val Pro Leu His Arg Cys Ser Ala
1 5 10

<210> 166
<211> 29
<212> PRT
<213> Homo sapiens

<400> 166
Met Arg Phe Cys Pro Tyr Ser His Arg Thr Arg Leu Val Leu Lys Ala
1 5 10 15

Lys Asp Ile Arg His Glu Val Val Asn Ile Asn Leu Arg
20 25

<210> 167
<211> 24
<212> PRT
<213> Homo sapiens

<400> 167
Asn Lys Pro Glu Trp Tyr Tyr Thr Lys His Pro Phe Gly His Ile Pro
1 5 10 15

Val Leu Glu Thr Ser Gln Cys Gln
20

<210> 168
<211> 24
<212> PRT
<213> Homo sapiens

<400> 168
Lys Leu Phe Pro Tyr Asp Pro Tyr Glu Arg Ala Arg Gln Lys Met Leu
1 5 10 15

Leu Glu Leu Phe Cys Lys Val Pro
20

<210> 169
<211> 25
<212> PRT
<213> Homo sapiens

<400> 169
Val Ala Leu Arg Cys Gly Arg Glu Cys Thr Asn Leu Lys Ala Ala Leu
1 5 10 15

Arg Gln Glu Phe Ser Asn Leu Glu Glu
20 25

<210> 170
<211> 24
<212> PRT
<213> Homo sapiens

<400> 170
Ser Met Ile Asp Tyr Leu Leu Trp Pro Trp Phe Glu Arg Leu Asp Val
1 5 10 15

Tyr Gly Ile Leu Asp Cys Val Ser
20

<210> 171
<211> 60
<212> PRT
<213> Homo sapiens

<220>

<221> MISC_FEATURE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 171
Ala Ala Gly Cys Val Trp Asp Thr Gly Leu Cys Glu Pro His Xaa Ser
1 5 10 15

Leu Arg Leu Trp Ile Ser Ala Met Lys Trp Asp Pro Thr Val Cys Ala
20 25 30

Leu Leu Met Asp Lys Ser Ile Phe Gln Gly Phe Leu Asn Leu Tyr Phe
35 40 45

Gln Asn Asn Pro Asn Ala Phe Asp Phe Gly Leu Cys
50 55 60

<210> 172
<211> 180
<212> PRT
<213> Homo sapiens

<400> 172
Val Tyr Leu Phe Leu Thr Tyr Arg Gln Ala Val Val Ile Ala Leu Leu
1 5 10 15

Val Lys Val Gly Val Ile Ser Glu Lys His Thr Trp Glu Trp Gln Thr
20 25 30

Val Glu Ala Val Ala Thr Gly Leu Gln Asp Phe Ile Ile Cys Ile Glu
35 40 45

Met Phe Leu Ala Ala Ile Ala His His Tyr Thr Phe Ser Tyr Lys Pro
50 55 60

Tyr Val Gln Glu Ala Glu Glu Gly Ser Cys Phe Asp Ser Phe Leu Ala
65 70 75 80

Met Trp Asp Val Ser Asp Ile Arg Asp Asp Ile Ser Glu Gln Val Arg
85 90 95

His Val Gly Arg Thr Val Arg Gly His Pro Arg Lys Lys Leu Phe Pro
100 105 110

Glu Asp Gln Asp Gln Asn Glu His Thr Ser Leu Leu Ser Ser Ser Ser
115 120 125

Gln Asp Ala Ile Ser Ile Ala Ser Ser Met Pro Pro Ser Pro Met Gly
130 135 140

His Tyr Gln Gly Phe Gly His Thr Val Thr Pro Gln Thr Thr Pro Thr
145 150 155 160

Thr Ala Lys Ile Ser Asp Glu Ile Leu Ser Asp Thr Ile Gly Glu Lys
165 170 175

Lys Glu Pro Ser
180

<210> 173
<211> 176

<212> PRT
<213> Homo sapiens

<400> 173
Thr Asn Asn Lys Asp Ser Leu Gly Trp Tyr Leu Phe Thr Val Leu Asp
  1   5   10   15

Ser Trp Ile Ala Leu Lys Tyr Pro Gly Ile Ala Ile Tyr Val Asp Thr
             20   25   30

Cys Arg Glu Cys Tyr Glu Ala Tyr Val Ile Tyr Asn Phe Met Gly Phe
         35   40   45

Leu Thr Asn Tyr Leu Thr Asn Arg Tyr Pro Asn Leu Val Leu Ile Leu
     50   55   60

Glu Ala Lys Asp Gln Gln Lys His Phe Pro Pro Leu Cys Cys Cys Pro
 65   70   75   80

Pro Trp Ala Met Gly Glu Val Leu Leu Phe Arg Cys Lys Leu Ser Val
                 85   90   95

Leu Gln Tyr Thr Val Val Arg Pro Phe Thr Thr Ile Val Ala Leu Ile
            100   105   110

Cys Glu Leu Leu Gly Ile Tyr Asp Glu Gly Asn Phe Ser Phe Ser Asn
        115   120   125

Ala Trp Thr Tyr Leu Val Ile Ile Asn Asn Met Ser Gln Leu Phe Ala
    130   135   140

Met Tyr Cys Leu Leu Leu Phe Tyr Lys Val Leu Lys Glu Glu Leu Ser
145   150   155   160

Pro Ile Gln Pro Val Gly Lys Phe Leu Cys Val Lys Leu Val Val Phe
                165   170   175

<210> 174
<211> 28
<212> PRT
<213> Homo sapiens

<400> 174
Gln Asn Ser Gln Arg Thr Gly Leu Pro Ile Thr Ile Phe Ser Arg Ser
  1   5   10   15

Phe Pro Leu Leu Thr Gly Ser Asp Leu Cys Glu Asn
             20   25

<210> 175
<211> 85
<212> PRT
<213> Homo sapiens

<400> 175
Gln Asn Ser Gln Arg Thr Gly Leu Pro Ile Thr Ile Phe Ser Arg Ser
  1   5   10   15

```
Phe Pro Leu Leu Thr Gly Ser Asp Leu Cys Glu Asn Met Pro Cys Thr
             20                  25                  30

Cys Thr Trp Arg Asn Trp Arg Gln Trp Ile Arg Pro Leu Val Ala Val
         35                  40                  45

Ile Tyr Leu Val Ser Ile Val Val Ala Val Pro Leu Cys Val Trp Glu
     50                  55                  60

Leu Gln Lys Leu Glu Val Gly Ile His Thr Lys Ala Trp Phe Ile Ala
 65                  70                  75                  80

Gly Ile Phe Leu Leu
                85
```

<210> 176
<211> 9
<212> PRT
<213> Homo sapiens

<400> 176
```
Gln Phe Phe Leu Cys Arg Asp Cys Ser
  1               5
```

<210> 177
<211> 38
<212> PRT
<213> Homo sapiens

<400> 177
```
Glu Arg Glu Ser Cys Ser Ile Ile Gln Ala Gly Val Gln Trp Cys Asn
  1               5                  10                  15

Leu Ser Ser Leu Arg Pro Pro Pro Pro Gly Phe Lys Gln Phe Ser His
             20                  25                  30

Leu Ser Leu Pro Ser Ser
         35
```

<210> 178
<211> 116
<212> PRT
<213> Homo sapiens

<400> 178
```
Leu Arg Glu Asn Leu Ala Leu Ser Ser Arg Leu Glu Cys Ser Gly Ala
  1               5                  10                  15

Ile Ser Ala His Cys Asp Leu His Leu Leu Gly Ser Ser Asn Ser Pro
             20                  25                  30

Thr Ser Ala Ser Gln Val Val Arg Thr Thr Gly Ala His His Gln Ala
         35                  40                  45

Gln Pro Ile Phe Val Phe Leu Val Glu Thr Gly Phe His His Val Gly
     50                  55                  60

Gln Ala His Leu Lys Gln Leu Thr Ser Arg Tyr Pro Pro His Leu Ala
 65                  70                  75                  80

Ser Gln Ser Ala Gly Ile Thr Gly Met Ser Tyr Arg Thr Gln Pro Lys
```

```
                85                  90                  95

Leu Leu Trp Phe Tyr Leu Tyr Lys Gln Phe Lys Gln Tyr Arg Glu Val
            100                 105                 110

Gly Ser Arg Lys
        115

<210> 179
<211> 25
<212> PRT
<213> Homo sapiens

<400> 179
Ser Ser Arg Leu Glu Cys Ser Gly Ala Ile Ser Ala His Cys Asp Leu
  1               5                  10                  15

His Leu Leu Gly Ser Ser Asn Ser Pro
             20                  25

<210> 180
<211> 40
<212> PRT
<213> Homo sapiens

<400> 180
Gly Ala His His Gln Ala Gln Pro Ile Phe Val Phe Leu Val Glu Thr
  1               5                  10                  15

Gly Phe His His Val Gly Gln Ala His Leu Lys Gln Leu Thr Ser Arg
             20                  25                  30

Tyr Pro Pro His Leu Ala Ser Gln
         35                  40

<210> 181
<211> 25
<212> PRT
<213> Homo sapiens

<400> 181
Ile Thr Gly Met Ser Tyr Arg Thr Gln Pro Lys Leu Leu Trp Phe Tyr
  1               5                  10                  15

Leu Tyr Lys Gln Phe Lys Gln Tyr Arg
             20                  25

<210> 182
<211> 25
<212> PRT
<213> Homo sapiens

<400> 182
Glu Asn Phe Pro Glu Thr Arg Glu Val Arg Ala Phe Ser Pro Arg Glu
  1               5                  10                  15

Asn Leu Glu Leu Cys Thr Cys Lys Ser
             20                  25

<210> 183
<211> 11
```

<212> PRT
<213> Homo sapiens

<400> 183
Ala Leu Tyr Cys Ser Pro Ser Leu Gln Ile Asp
1 5 10

<210> 184
<211> 37
<212> PRT
<213> Homo sapiens

<400> 184
Cys His Cys Ser Met Leu Lys Ser His Gly Asp Val Gln Asn Val Leu
1 5 10 15

Thr Leu Phe Val Thr Val Leu Ser Asp Val Ser Tyr Leu Gln Gln Ile
20 25 30

Gln Lys Lys Leu Arg
35

<210> 185
<211> 39
<212> PRT
<213> Homo sapiens

<400> 185
Cys Tyr Phe His Gln Lys Ala Gln Ser Asn Gly Pro Glu Lys Gln Glu
1 5 10 15

Lys Glu Gly Val Ile Gln Asn Phe Lys Arg Thr Leu Ser Lys Lys Glu
20 25 30

Lys Lys Glu Lys Lys Lys Lys
35